| IRAO OFFICE USE ONLY | | | |
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| | | | |
| Received | | | |
| In Banner | | | |
| MTVCOMP/Codeset | | | |
| Master Curriculum | | | |
| CIP Code | | | |
| Program Code | | | |
| Program Description | | | |

University of Hawai'i **Code Request Form for Academic Programs for**

808-734-9519

W OR MODIFY ROGRAM CODE

Phone

Reset Form

| Program Descri | iption | | |
|----------------|---|-----------------|------------------------|
| ت | w Program Code Modify P | rogram Code | Date: 24 February 2016 |
| Name Title | Louise Pagotto Walky Pagotto Vice Chancellor for Academic Affairs | Campus Kapiolan | i CC hawaii.edu |

Office/Dept Academic Affairs

| Institution | KAP - | Kap | iolani CC | 2.00 | Campus | KAP - Kapiolani CC |
|----------------|-----------|--------------------|------------------------|--------------|----------------------------|-------------------------------|
| Level | UG - L | JG - Undergraduate | | | Effective Term | fall 2016 |
| | | | Code (Max. Characters) |)*· | Description | Check if requesting new code: |
| College | | (2) | BE | Business | ducation | See Banner form STVCOLL |
| Department | | (4) | BUS | Business | | See Banner form STVDEPT |
| Degree/Cerl | ificate | (6) | CA | Certificat | of Achievement | See Banner form STVDEGC |
| Major | | (4) | IT | Informati | Technology | See Banner form STVMAJR |
| Concentrati | on | (4) | ISA | Cyber Se | ırity | See Banner form STVMAJR |
| Minor | | (4) | | | | See Banner form STVMAJR |
| If a similar n | najor/cor | ncent | ration code exi | sts in Banne | olease list the code: | |
| Justification | to warra | nt a | new major/con | centration o | e similar to an existing m | najor/concentration code: |

/ Should this program be available for applicants to select as their planned course of study Yes No on the online application? If yes, student may select the code as their only program of study. RULES PERTAINING TO FINANCIAL AID AND 150% DIRECT SUBSIDIZED LOAN LIMIT LEGISLATION Is 50% or greater of the classes in this program offered at a location other than the Home Yes **1** No Campus? **√** Is this program/major/certificate financial aid eligible? Yes No **1** Does this certificate qualify as a Gainful Employment Program (Title IV-eligible certificate Yes No program)? See http://www.ifap.ed.gov/GainfulEmploymentInfo/index.html

| Program | Lengti | 1 |
|---------|--------|---|
|---------|--------|---|

In academic years; decimals are acceptable. The length of the program should match what is published by the campus in any online and/or written publication.

Is this major/concentration code being used the same way at the other UH campuses?

Special Program Designations

See Special Program Designations Code Definitions on IRAO Program Code Request webpage

Required Terms of Enrollment:

Fall

Spring

1.0

Summer

1

Yes

U

No

Extended

University of Hawai'i Code Request Form for Academic Programs

NEW OR MODIFY PROGRAM CODE

| ADDITIONAL COMMENTS | | |
|--|--|-----------------------------------|
| The ISA concentration is in use a | at Honolulu CC and at UHWO. | |
| | | |
| | | |
| | | |
| | | |
| | | |
| ATTACHMENTS | | |
| · · | nd Graduate Degrees, and sole credential certi | |
| BOR Meeting Minutes & Supporting | ng Documents | |
| Memo from Chancellor to notify V | | |
| For new certificates approved by the | Chancellor, the related BOR authorized acade | mic program is: |
| <u> </u> | nformation Techn | ology |
| | | 3") |
| VERIFICATIONS | | |
| By signing below, I verify that I have I | reviewed and confirm the above information | that is pertinent to my position. |
| Registrar: | | |
| Jerilynn L. Enokawa | Steen and & Carley | ~) 2hhu |
| Registrar | Signature A. Erohaw | Date |
| Print Name | Signature | butc |
| Financial Aid Officer: | • | |
| Jennifer Bradle | 24 / | 2/25/2016 |
| Print Name | Signature / | Date |
| For Community Colleges, verification | of consultation with OVPCC Academic Affairs | : |
| Suzalle Rabinan | Dog Rolem: | 3/2/16 |
| Print Name | Signature | Date |

KAPI'OLANI COMMUNITY COLLEGE University of Hawai'i PROGRAM ACTION REQUEST (Form 1/10/11)

1a. Type of Program Action: Addition

2. Program Type: CERTIFICATE OF ACHIEVEMENT

3. Program Name and Program Description:

Certificate of Achievement in Information Technology Cyber Security

The Certificate of Achievement in Information Technology Cyber Security program is a competency-based program that is designed to prepare students for Information Technology Cyber Security entry-level positions in a business or government environment involving computer, network, and data security. The certificate will enhance the information technology and security skills of the small business owner, non-information technology account clerk, office administrator, office manager, and health, legal, hospitality, or other professional to become the key information technology security support users in their respective areas.

4. Effective Term (semester/year): Fall / 2016

5. Revise pages Section C (Degree and Certificate) pages 3 and 16 in the 2014-2015 online version of the Kapi'olani Community College General Catalog.

6. Is this program offered at another UH Campus? Yes. LCC has a CA in Cyber Security; however, it is in the ICS discipline and the courses and content are different.

7. Justification

The Information Technology faculty propose the creation of the Certificate of Achievement in Cyber Security curriculum to better serve the needs of our students and the information technology market in Hawai'i. Continuous and yearly updating of this program is required to stay current with new and established information technology security practices in Hawai'i and throughout the world. This year the Information Technology program is undergoing significant change. The creation of this certificate reflects the beginning of those changes of the Information Technology program. The proposed changes would pivot the Information Technology Program more toward security concerns, allowing students who have the interest and inclination to pursue studies in this area with rapidly increasing demand. The changes would provide students with a strong base (first semester courses in networking, programming and databases) as well as some depth in our newest, fourth pillar of the program (cyber security). This certificate would provide students with the academic credentials to gain employment at a starting level in cyber security support services in a small to medium size business or government agency.

<u>Curriculum Addition:</u> The creation of the Certificate of Achievement in Information Technology Cyber Security curriculum involves the following.

1. Writing the description and competencies of the curriculum, including the addition of a Program Student Learning Outcome (PLO) in cyber security.

2. Adding courses that are specifically related to cyber security.

Writing the descriptions and competencies of the curriculum. Although the Information Technology Program already has one Certificate of Achievement, it is for entry level help desk support and its focus is more on providing desktop support questions and malfunctions in information technology and is not security focused. This new CA will use the same information technology foundations (first semester information technology courses) and build up the new security line to provide students with the necessary skill sets to immediately go into an information technology work environment and provide cyber security support.

Adding cyber security courses ITS 122, ITS 142, and ITS 222 to push up the foundation courses to provide depth in a field: In an effort to make the Information Technology certificates laddered, all courses in this CA proposal are applicable toward the Information Technology A.S. Degree. Students can develop a broad base as well as some depth in security essentials, network security, and certified ethical hacking.

These three courses, (ITS 122, 142, and 222) provide the cyber security foundation accepted by the NSA's educational framework, as detailed at: www.iad.gov/NIETP/index.cfm. It also lays the foundation for the college to be accepted as a Center of Academic Excellence (CAE) in Information Assurance as noted at: https://www.iad.gov/NIETP/reports/cae designated institutions.cfm.

| Requested by: Steven A. Singer | Business, Legal, and Technology | Education Feb 18, 2015 |
|--------------------------------|---------------------------------|---------------------------|
| (Name) | (Department) | (Date) |
| Trude Pang | ~ F () | Feb 18, 2015 |
| (Department Champerson) | | (Date of Department Vote) |
| Approved by: | () | 12/10/15 |
| (Dean) | 11/1/1 | (Date) |
| Kapulani Landy | Well Lone | 12/15/15 |
| (Curriculum Chairperson) | | (Date) |
| I woner to kake | _ | 12/5/15 |
| (Faculty Senate Chairperso | on) | (Date)/ |
| WOWA PA | POH 1/2/16 | |
| (Vice Chancellor of Acade | mic Affairs) | (Date) |
| Televa | L 1616 | |
| (Chancellor) | | (Date) |

UNIVERSITY OF HAWAI'I • KAPI'OLANI COMMUNITY COLLEGE Business, Legal, and Technology Education Department

Action Request Memo February 18, 2015

To:

Leon Richards, Chancellor

Veronica Ogata, Faculty Senate Chair

John Richards, CTE Dean (R)

Louise Pagotto, Vice Chancellor for Academic Affairs

From:

Steven A. Singer, Information Technology Professor

Subject: Proposed CA in Information Technology Cyber Security

1. **SPECIFIC ACTION REQUESTED:** Approval of a New Certificate of Achievement in Information Technology Cyber Security.

Program Description:

The Proposed Information Technology CA Curriculum

Proposed IT Certificate of Achievement

The Certificate of Achievement in Information Technology Cyber Security program is a competency-based program that is designed to prepare students for information technology cyber security entry-level positions in a business or government environment involving computer hardware or software, or network cyber security. The certificate will enhance the information technology cyber security skills of the small business owner, non-information technology account clerk, office administrator, office manager, and health, legal, hospitality, or other professional to become the key information technology security support users in their respective areas.

Upon successful completion of the Certificate of Achievement in Information Technology Cyber Security program, the student should have met the following Information Technology Student Learning Outcomes (SLOs):

- 1. Design and develop software solutions for contemporary business environments by employing appropriate problem solving strategies.
- 2. Configure and administer database servers to support contemporary business environments.
- 3. Configure and administer networks to contribute to contemporary business solutions.
- 4. Design, and develop web solutions to address contemporary business objectives.
- 5. Learn future technologies through acquired foundational skills and knowledge and employ them in new business environments.
- 6. Practice communication, problem solving and decision-making skills through the use of appropriate technology and with the understanding of the business environment.
- 7. Demonstrate knowledge of current information, network, and cyber security issues and implement best practices in mitigation and recovery.

2. RECOMMENDED EFFECTIVE DATE: Fall 2016

3. PURPOSE:

Overview of this Program Action:

The Information Technology faculty propose the creation of the Certificate of Achievement in Information Technology Cyber Security curriculum to better serve the needs of our students and the information technology market in Hawai'i. Continuous and yearly updating of this program is required to stay current with new and established cyber security best practices in Hawai'i and throughout the world. This year the Information Technology program is undergoing significant changes. The creation of this certificate reflects the foundation of upcoming changes of the Information Technology program. This certificate provides both an exit point for those students who are interested and able to pursue the field of cyber security and begin work immediately, as well as a pathway for those who have chosen to go on to complete their A.S.

Support for these changes was emphasized by our advisory committee, the UH System Wide Cyber Security Initiative, and Federal and State government support for Cyber Security. The TAACCCT (Trade Adjustment Assistance Community College and Career Training) grant, Round 4 (C3T4): http://www.doleta.gov/taaccct/grantawards.cfm will provide the funding to update the curriculum. There is currently an unmet need for Cyber Security workers and this unmet need will continue for the State of Hawai'i. (See attachments.) MSNBC News announced today February 10, 2015 that the United States government is creating a new agency to monitor Cyber Security threats by pooling and analyzing information on a spectrum of diverse risks. Cyber Security attacks are a serious threat for the United States, for all business, and for us individually. The proposed Certificate of Achievement will infuse cyber security into the curriculum to provide students the necessary background and knowledge to protect against cyber security threats, to recognize threat, and to apply tools to remove the threats.

Proposed Modifications:

The creation of the Certificate of Achievement in Information Technology Cyber Security curriculum involves the following.

- 1. Writing the description and competencies of the curriculum, including the addition of a Program Student Learning Outcome (PSLO) in cyber security.
- 2. Adding courses that are specifically related to cyber security

Writing the descriptions or and competencies for the curriculum. Although the Information Technology Program already has one Certificate of Achievement, it is for entry level help desk support and its focus is more on providing desktop support questions and malfunctions in information technology and is not security focused. This new CA will use the same information technology foundations (first semester information technology courses) and build up the new security line to provide students with the necessary skill sets to immediately go into an information technology work environment and provide cyber security support.

Adding cyber security courses ITS 122, ITS 142, and ITS 222 to push up the foundation courses to provide depth in a field: In an effort to make the Info Tech certificates laddered, all courses in this CA

proposal are applicable toward the Information Technology A.S. Degree. Students can develop a broad base as well as some depth in security essentials, network security, and certified ethical hacking.

These three courses, (ITS 122, 142, and 222) provide the cyber security foundation accepted by the NSA's educational framework, as detailed at: www.iad.gov/NIETP/index.cfm. It also lays the foundation for the college to be accepted as a Center of Academic Excellence (CAE) in Information Assurance as noted at: https://www.iad.gov/NIETP/reports/cae designated institutions.cfm.

4. SPECIFIC ISSUES:

Program changes in addition to course curricular changes (see attached list) require modifications in the program descriptions and program competencies.

Staffing: A new Information Technology faculty with specialization in Cyber Security will be needed. This new instructor will fill a vacant position that currently exists in the BLT Department. If the new instructor is not available, extensive training will be required of existing faculty and lecturers to implement the changes. Faculty and lecturers will be managed internally by the BLT Department. The Information Technology Program and BLT Department will continue to offer ICS 100 and ICS 101 to support the new information technology courses. Courses will be managed through traditional and nontraditional delivery methods to meet daytime, evening, and weekend program requirements

Noninstructional Resources: Grants have been secured via Perkins and most recently through the C3T4 to support equipment and software for the first few years. Thereafter, a combination of follow up grants, new grants, and college support of equipment and software upgrades on a regular cycle is assumed to occur, as it has in the past, to support the CA Certificate and A.S. degree in Information Technology curriculum. College support for the infrastructure support of the BLT labs, BLT Building, and the campus should continue as usual with no added costs.

ENG 100 and ESL 100 were designated as written communication options. ENG 160 was not considered as an option for written communication, because it has not been offered since fall 2014 and it is scheduled for deletion from the college catalog.

ICS 141 has been included as a math option since it provides logic and math formalism which is important in networking and programming courses.

The UHCC, including Kapi'olani Community College, has recently received a TAACCCT (Trade Adjustment Assistance Community College and Career Training) grant, Round 4 (C3T4): http://www.doleta.gov/taaccct/grantawards.cfm. As part of that grant, Kapi'olani Community College's Information Technology Program is purchasing significant hardware resources to help deliver curriculum in the cyber security field (Netlab+ PE: http://www.netdevgroup.com/products/. In addition, the program is required to develop curriculum, including a Certificate of Achievement in Cyber Security) for the grant.

Furthermore, House Bill 979 allocates nearly \$1M each year for the next two years for cyber security education in UHCC system which can help support the offering of cyber security courses.

5. BACKGROUND AND CONSEQUENCES

The Information Technology faculty propose the creation of the Certificate of Achievement in Cyber Security curriculum to better serve the needs of our students and the information technology market in Hawai'i. Continuous and yearly updating of this program is required to stay current with new and established information technology security practices in Hawai'i and throughout the world. This year the Information Technology program is undergoing significant changes. The creation of this certificate reflects the beginning of those changes of the Information Technology program. The proposed changes would pivot the Information Technology Program more toward security concerns, allowing students who have the interest and inclination to pursue studies in this area with rapidly increasing demand. The changes would provide students with a strong base (first semester courses in networking, programming and databases) as well as some depth in our newest, fourth pillar of the program (cyber security). This certificate would provide students with the academic credentials to gain employment at a starting level in cyber security support services in a small to medium size business or government agency.

The consequence of approving this certificate program would be providing our students the beginning of an excellent career path in a well-paying, in demand field: cyber security. This CA will fit nicely in the revised AS in Information Technology Program, being currently put forward, as well as the upcoming modified APC in Information Technology Program, which will articulate with UHWO's BAS in Information Technology and BAS in IA (Information Assurance).

Delaying or not approving the proposal would mean Kapi'olani Community College Information Technology students would not be qualified to enter this field through their studies at Kapi'olani Community College. Furthermore, it would jeopardize the UHCC system's ability to meet the deliverables in this latest C3T4 grant. As a result, there may be some confusion about the CA and students might go to other institutions to obtain the necessary knowledge and skills. Furthermore, not approving the proposal would make us unlikely to qualify for any monies from HB 979, Cyber Security Workforce Development.

6. ACTION RECOMMENDED

Approval of the modifications to the Certificate of Achievement in Information Technology Cyber Security commencing Fall 2016 or earlier.

The Proposed Information Technology Certificate of Achievement in Cyber Security curriculum.

| First Semester | | Credits |
|---|------------------|---------|
| ICS 101 Digital Tools for the Information World | | |
| OR | | |
| ICS 100 Computing Literacy and Applications | | 3 |
| ITS 122 Cyber Security Fundamentals | | 3 |
| ITS 142 Network Security | | 3 |
| ITS 124 Small Business Networking | | 3 |
| BUS 120 Principles of Business | | |
| OR | | |
| ACC 201 Introduction to Financial Accounting | | 3 |
| · | Semester Credits | 15 |
| Second Semester | | |
| ICS 141 Discrete Mathematics for Computer Science I | | |
| OR | | |
| BUS 250 Applied Mathematics in Business | | |
| OR | | |
| MATH 103 (or higher) Fundamentals of College Algebra | | 3 |
| ENG 100/ESL 100(or higher) Composition 1 | | 3 |
| ITS 129 Introduction to Databases | | 3 |
| ITS 128 Introduction to Problem Solving and the Programming Process | | 3 |
| ITS 222 Cyber Attacks and Defense | | 3 |
| • | Semester Credits | 15 |

The issuance of a Certificate of Achievement requires that the student must earn a grade point ratio (G.P.R.) of 2.0 or higher for all courses required in the certificate.

Please note: In order to receive the certificate, a grade of "C" or higher is required in all Information Technology courses. ITS Courses are typically offered in both 8-week and 16 week formats.



Nora Matsubara <noram@hawaii.edu>

Re: Chancellor Richards' Out-of-State Travel Notification

1 message

Nora Matsubara <noram@hawaii.edu>

Mon, Feb 8, 2016 at 4:26 PM

To: John Morton <jmorton@hawaii.edu>, CC Chancellors -I <cc-chanc-l@lists.hawaii.edu>, cac-l@lists.hawaii.edu, cacspt-l@lists.hawaii.edu, hic-l@lists.hawaii.edu, Mary Inouye <meinouye@hawaii.edu>, "Hoang, Linh" <Linh. Hoang@uhfoundation.org>



All~

Chancellor Richards will be out of state from Monday, February 15-19, 2016 doing follow-up visits and having discussions with the EIKEN and Hawaii Exchange Center (HEC) leadership teams in Tokyo, Japan. He will be returning to the office on Monday, Feb 22.

During his absence, Vice Chancellor for Academic Affairs Louise Pagotto will be acting on his behalf.

Thank you, Nora

Nora Matsubara Secretary to the Chancellor Kapi'olani Community College 4303 Diamond Head Road, Ilima 213 Honolulu, HI 96816

Phone: (808) 734-9565 Fax: (808) 734-9162

Memo to J Morton_Japan Feb 15-20 2016.pdf 301K



February 17, 2016

TO:

Risa Dickson

Vice President for Academic Affairs

FROM:

 \mathcal{A} Leon Richards \mathcal{A}

Chancellor, Kapi'olani Community College

SUBJECT:

Request Codes for New Certificates at Kapi'olani Community College

Effective fall 2016, Kapi'olani Community College has created three (3) new certificates; a Certificate of Achievement in CyberSecurity, a Certificate of Competence in CyberSecurity, and a Certificate of Competence in School Health Aide. Links to the Program Action Requests and Action Request Memoranda were emailed to you on Wednesday, January 20, 2016.

Kapi'olani Community College is submitting code requests for CA-IT-ISA, CO-IT-ISA, and CO-SHA.