University of Hawai'i
Code Request Form for Academic Programs

NEW OR MODIFY PROGRAM CODE

Form #CR-AP1
Modified June 2017

☒ **New Program Code** ☐ **Modify Program Code** Date: 1/20/2017

REQUESTOR CONTACT INFORMATION

Name	Susan Kazama	Campus	Kapi'olani CC
Title	Interim Vice Chancellor for Academic Affairs	Email	smurata@hawaii.edu
Office/Dept	Academic Affairs	Phone	808-734-9519

NEW PROGRAM CODE TO CREATE

Institution	KAP - Kapiolani Community College	Campus	KAP - Kapiolani Community College
Level	UG - Undergraduate	Effective Term	Fall 2017

	Code (Max. Characters)		Description	Check if requesting new code:
College	(2)	AR	Arts & Sciences	☐ See Banner form STVCOLL
Department	(4)	AR	Arts & Sciences	☐ See Banner form STVDEPT
Degree/Certificate	(6)	CA	Certificate of Achievement	☐ See Banner form STVDEGC
Major	(4)	~~SMED~~ NSCI	~~STEM Education~~ Natural Science	☐ See Banner form STVMAJR
Concentration	(4)	SMED	STEM Education	☐ See Banner form STVMAJR
Minor	(4)			☐ See Banner form STVMAJR

If a similar major/concentration code exists in Banner, please list the code:

Justification to warrant a new major/concentration code similar to an existing major/concentration code:

Is this major/concentration code being used the same way at the other UH campuses? ☐ Yes ☒ No

Should this program be available for applicants to select as their planned course of study on the online application? *If yes, student may select the code as their only program of study.* ☒ Yes ☐ No

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 Campus? ☐ Yes ☒ No

Is this program/major/certificate financial aid eligible? ☐ Yes ☒ No

Does this certificate qualify as a Gainful Employment Program (Title IV-eligible certificate program)? ☐ Yes ☒ No
See http://www.ifap.ed.gov/GainfulEmploymentInfo/index.html

Program Length
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. 1.5

Special Program Designations ☐ A ☐ B ☐ N ☐ P ☐ T ☒ U
See Special Program Designations Code Definitions on IRAO Program Code Request webpage

Required Terms of Enrollment: ☒ Fall ☒ Spring ☐ Summer ☐ Extended

IRAO USE ONLY: DATE RECEIVED

NEW OR MODIFY PROGRAM CODE

ADDITIONAL COMMENTS

ATTACHMENTS

BOR Approved: Sole-credential Certificates, Associate (excluding ATS), Bachelor and Graduate Degrees, and sole credential certificates

☐ BOR Meeting Minutes & Supporting Documents ☐ Curriculum

Chancellor Approved: Concentrations, Certificates and Associate in Technical Studies (ATS) Degree

☒ Memo from Chancellor to notify Vice President for Academic Planning and Policy regarding program action.

☒ Curriculum

CERTIFICATES ONLY: Please check one (1) statement. This certificate is a...

☐ BOR approved certificate. BOR Meeting/Approval Date: _____

☒ Chancellor approved within an authorized BOR program. BOR Program: AS Natural Sciences

☐ Chancellor approved CO in accordance with UHCCP 5.203, Section IV.B.10.

VERIFICATIONS

By signing below, I verify that I have reviewed and confirm the above information that is pertinent to my position.

Registrar
(Print Name)

J. Enokawa

Signature 8/11/17 Date

Financial Aid Officer
(Print Name)

J.Bradley

Signature Date

For Community Colleges, verification of consultation with OVPCC Academic Affairs:

Suzette Robinson

Signature 9/11/17 Date

UNIVERSITY of HAWAI'I
KAPI'OLANI
COMMUNITY COLLEGE

Memorandum

August 17, 2017

TO: Peter Quigley
Associate Vice President for Academic Affairs

FROM: Louise Pagotto
Interim Chancellor, Kapi'olani Community College

SUBJECT: Requesting Code for New Certificate of Achievement at Kapi'olani Community College

---

During AY 2016-2017, a curricular proposal for a Certificate of Achievement in STEM Education was presented to the campus. The Curriculum Committee, Faculty Senate, and Academic Affairs have approved the proposal. I approved the proposal on January 20, 2017. The approved proposal for the Certificate of Achievement in STEM Education is attached.

Please note that Kapi'olani CC now uses the digital database Kuali Student Curriculum Management (KSCM) for the approval process.

Kapi'olani Community College is submitting a code request for CA-SMED.

4303 Diamond Head Road
Honolulu, Hawai'i 96816-4421
Telephone: (808)734-9565
Facsimile: (808)734-9162
Website: www.kapiolani.hawaii.edu

Proposed Certificate of Achievement in STEM Education
Curriculum to become effective Fall 2017.

CERTIFICATE OF ACHIEVEMENT IN STEM EDUCATION		* = Suggested Semester				
Course	Title	Credits	1	2	3	4
ENG 100 or ESL 100	Composition I Composition I	3	*			
MATH 205	Calculus I	4	*			
CHEM 161	General Chemistry I	3	*			
CHEM 161 L	General Chemistry I Lab	1	*			
BIOL 171	Introduction to Biology I	3		*		
BIOL 171L	Introduction to Biology I Lab	1		*		
PHYS 151 or 170	College Physics I or General Physics I	3 or 4			*	
PHYS151L or 170L	College Physics I Lab or General Physics I Lab	1			*	
ICS 101 or EE 160 or ICS 111	Digital Tools for the Information World or Programming for Engineers or Intro to Computer Science I	3 or 4		*		
ED 277	Introduction to Multicultural Education	3	*			
ED 284	Foundations of Inclusion in Teaching	3		*		
ED 285	Classroom Management within the Instructional Process	3		*		
ED 289	Educational Psychology	3			*	
ED 290	Foundations in Education	3			*	
	TOTAL	37 or 39				

The issuance of a Certificate of Achievement in STEM Education requires that the student must earn a cumulative grade point ratio (GPR) of 2.0 or higher for all courses applicable toward the degree.

CA- STEM ED | Certificate of Achievement in STEM Education

Future | Fall 2017 — Indefinite

BANNER CODE FOR PROGRAM
CA- STEM ED

CIP CODE FOR PROGRAM

BANNER TITLE FOR PROGRAM
Certificate of Achievement in STEM Education

A.) General Catalog Information (ʻIke Moʻohaʻawina)

A.1) PROGRAM TITLE (POʻO PAPAHANA)
Certificate of Achievement in STEM Education

A.2) PROGRAM LEVEL TYPE (KŪLANA PAPAHANA)
Certificate

A.3) DEGREE TYPE (ʻANO O KE KĒKELĒ)
Certificate of Achievement

A.4) PROGRAM DESCRIPTION FOR CATALOG (HULIKOʻA PAPA NO KA MOʻOHAʻAWINA)
The Certificate of Achievement in STEM Education provides a curricula that focus on basic Science, Technology, Engineering and Mathematics (STEM) as well as a solid knowledge and skills in Education. This Certificate provides a clear pathway for students planning to be secondary school educators in STEM.

A.5) CAREER OPTIONS FOR CATALOG (NĀ KOHO ʻOIHANA NO KA MOʻOHAʻAWINA)
Transfer to a four year institution and opportunities for employment as Teacher Assistants in Elementary and High Schools.

A.6) CATALOG GRID

- Curriculm for STEM ED.docx (/api/cm/files/f84726a4-5f50-4e20-be93-f63d1641350b)

A.7) CURRICULUM GRID COMMENTS (MANAʻO KŪ PAPA HAʻAWINA)
The issuance of a Certificate of Achievement in STEM Education requires that the student must earn a cumulative grade point ratio (GPR) of 2.0 or higher for all courses applicable toward the degree.

A.8) MISSION STATEMENT (ALA NUʻUKIA)

A.9) PROGRAM ACCREDITATION INFORMATION (ʻIKEPILI HUI ʻĀPONO POLOKALAMU)

A.10) APPLICATION PERIOD TO BE LISTED IN THE CATALOG

B.) Program Learning Outcomes

B.1) PROGRAM LEARNING OUTCOMES (PAPAHANA KŪLE'A 'LKE)

CA - STEM Education - Use instructional and behavioral management strategies to facilitate a positive learning environment for students.
LINKED COURSE OUTCOMES
--- None ---
CA - STEM Education - Demonstrate knowledge and skills specific to the instruction and support of students in a variety of settings.
LINKED COURSE OUTCOMES
--- None ---
CA - STEM Education - Use informed decision making to function effectively in the classroom, school, local, and/or professional communities.
LINKED COURSE OUTCOMES
--- None ---
CA - STEM Education - Demonstrate professionalism and ethical practices in the classroom, school, local, and professional communities.
LINKED COURSE OUTCOMES
--- None ---
CA - STEM Education - Use communication skills to work effectively with students, their families, school administrators, teachers, staff, and other related personnel.
LINKED COURSE OUTCOMES
--- None ---
AS - Natural Science - Apply scientific knowledge, skills, and methods to problem solving, with a special emphasis on Hawai'i, where appropriate.
LINKED COURSE OUTCOMES
--- None ---
AS - Natural Science - Conduct inquiry-based investigations using computer algorithms, engineering design reviews, and/or the scientific process.
LINKED COURSE OUTCOMES
--- None ---
AS - Natural Science - Utilize analytical reasoning or mathematical techniques to describe physical or biological phenomena.
LINKED COURSE OUTCOMES
--- None ---
AS - Natural Science - Critically review discipline-specific literature and effectively communicate unbiased research orally and in writing.
LINKED COURSE OUTCOMES
--- None ---

C.) Program Requirements

C.1) PROGRAM ENTRANCE REQUIREMENTS/PREREQUISITES (KOINA KOMO)

First Semester 14
Total Credits

- Earned a minimum grade of C in each of the following:
  - ENG 100 - Composition I (3)

- MATH 205 - Calculus I (4)
- CHEM 161 - General Chemistry I (3)
- CHEM 161L - General Chemistry I Lab (1)
- ED 290 - Foundations of Education (3)

Second Semester

13 - 14
Total Credits

- Complete all of the following
  - Earned a minimum grade of C in each of the following:
    - BIOL 171 - Introduction to Biology I (3)
    - BIOL 171L - Introduction to Biology I Lab (1)
    - ED 284 - Foundations of Inclusion in Teaching (3)
    - ED 289 - Educational Psychology (3)
  - Complete 1 of the following
    - Earned a minimum grade of C in each of the following:
      - ICS 101 - Digital Tools for the Information World (3)
    - Earned a minimum grade of C in each of the following:
      - ICS 111 - Introduction to Computer Science I (3)
    - Earned a minimum grade of C in each of the following:
      - EE 160 - Programming for Engineers (4)

Third Semester

10 - 11
Total Credits

- Complete all of the following
  - Earned a minimum grade of C in each of the following:
    - ED 285 - Classroom Management within the Instructional Process (3)
    - ED 277 - Introduction to Multicultural Education (3)
  - Complete 1 of the following
    - Earned a minimum grade of C in each of the following:
      - PHYS 151 - College Physics I (3)
    - Earned a minimum grade of C in each of the following:
      - PHYS 170 - General Physics I (4)
  - Complete 1 of the following
    - Earned a minimum grade of C in each of the following:
      - PHYS 151L - College Physics Laboratory I (1)
    - Earned a minimum grade of C in each of the following:
      - PHYS 170L - General Physics Lab I (1)

Grand Total Credits: 37 - 39

C.2) SATISFACTORY PROGRESS REQUIREMENTS (KOINA HOLOMUA KŪPONO)
The minimum required GPR will be set as 2.0 (C) and the minimum acceptable grade will be set as 2.0 (C).

No Rules

C.3) PROGRAM COMPLETION REQUIREMENTS (KOINA PAPAHANA HOʻOPAU)
37 - 39 credits from the sequence of first, second, and third semester courses.

No Rules

C.4) STAR GPS REGISTRATION PRIORITY LIST

- [CA in STEM Education] STAR GPS REGISTRATION PRIORITY LIST.doc (/api/cm/files/8d3e84de-7a6c-48e5-a580-510b6a6e986b)

D.) BOR Information Pre-Fall 2016 (ʻIke Pili Papa o NĀ Kahu Kula)

D.1) PROGRAM JUSTIFICATION (HOʻĀPONO PAPAHANA)

D.2) PROGRAM MISSION AND OBJECTIVES (PAPAHANA ALA NUʻUKIA ME KA PAHUHOPU HĀIKI)

D.3) PROGRAM CURRICULUM PLAN (MOʻOHAʻAWINA)

D.4) PROGRAM TARGET GROUP (NA WAI E KOMO)

D.5) PROGRAM RESOURCES (PONO PAPAHANA)

D.6) PROGRAM EFFICIENCY (PAPAHANA HOLO PONO)

D.7) PROGRAM EFFECTIVENESS (PAPAHANA KŪLEʻA)

D.8) ATTACH A BOR SUBMISSION HERE

D.9) ATTACH A MEMO CONFIRMING BOR APPROVAL HERE

E.) New Academic Programs Fall 2016 and Later

E.1) PROGRAM PURPOSE AND OUTCOMES

E.1a) DESCRIBE THE PURPOSE OF THE PROPOSED PROGRAM IN TERMS OF MEETING STUDENT, COMMUNITY OR STATE NEEDS

E.1b) IDENTIFY THE PROGRAM OUTCOMES, WHAT THE STUDENT WILL KNOW AND BE ABLE TO DO AT THE COMPLETION OF THE PROGRAM.

E.1c) DESCRIBE THE FIT OF THE PROPOSED PROGRAM WITH SYSTEM/CAMPUS MISSION AND STATE NEED.

E.2) PROGRAM ORGANIZATION

E.2a) PROVIDES A DESCRIPTION OF CURRICULUM ORGANIZATION, TOTAL CREDITS TO COMPLETE THE PROGRAM INCLUDING ALL PREREQUISITE REQUIREMENTS, ADMISSION POLICIES, ADVISING, AND OTHER ASPECTS OF THE PROGRAM, WITH REFERENCE TO ITS GOALS/OUTCOMES.

E.2b) INCLUDES AN ACADEMIC MAP FOR CERTIFICATE OF ACHIEVEMENT, ASSOCIATE AND BACHELOR DEGREES THAT DEMONSTRATES ON TIME COMPLETION.

E.2c) PROVIDES JUSTIFICATION FOR A PROGRAM THAT IS MORE THAN 30 CREDITS FOR A CERTIFICATE OF ACHIEVEMENT OR 60 CREDITS FOR AN ASSOCIATE DEGREE OR 120 CREDITS FOR A BACHELOR'S DEGREE.

E.2d) DESCRIBES PROVISIONS FOR ARTICULATION WITH UH COMMUNITY COLLEGE DEGREES FOR BACHELOR'S DEGREES.

E.3) STUDENT DEMAND

E.3a) DESCRIBES THE PROFILE OF STUDENTS WHO WILL LIKELY ENROLL IN THE PROGRAM AND INCLUDES A DISCUSSION ON THE LIKELIHOOD OF THE PROGRAM ATTRACTING NEW STUDENTS TO THE CAMPUS OR EXISTING STUDENTS.

E.3b) PROVIDES EVIDENCE OF STUDENT INTEREST (I.E. NEEDS ASSESSMENT).

E.3c) INCLUDES AN ESTIMATE NUMBER OF MAJORS PER YEAR WITH AN EXPLANATION ON HOW THIS NUMBER WAS DETERMINED.

E.4) PROGRAM RESOURCES AND EFFICIENCY

E.4a) DESCRIBE RESOURCES REQUIRED FOR PROGRAM IMPLEMENTATION AND FIRST CYCLE OPERATION.

E.4b) DESCRIBE THE EXPECTED SOURCES OF FUNDS, INCLUDING SOURCES OF REALLOCATED FUNDS.

E.4c) COMPARE ANTICIPATED COST PER SSH, COST PER MAJOR, SSH/FACULTY, AVERAGE CLASS SIZE OR OTHER QUANTITATIVE MEASURE WITH OTHER PROGRAMS IN THE COLLEGE AND SIMILAR PROGRAMS ON OTHER UH CAMPUSES.

E.4d) LIST SIMILAR PROGRAMS AT OTHER UH CAMPUSES AND DESCRIBE HOW THE PROPOSED PROGRAM DIFFERS OR IS SIMILAR TO THESE PROGRAMS. PROVIDE THE RATIONALE FOR THE NEW PROGRAM IF A SIMILAR PROGRAM OR PROGRAMS EXIST.

E.5a) DESCRIBE THE PLAN FOR ASSESSING THE QUALITY OF STUDENT LEARNING.

E.5b) IDENTIFY RELEVANT PROGRAM ACCREDITATION AND PLANS TO MEET ACCREDITATION REQUIREMENTS

E.5) IDENTIFY RELEVANT PROGRAM ACCREDITATION AND PLANS TO MEET ACCREDITATION REQUIREMENTS.

E.6) ATTACH A COMPLETED DOCUMENT WITH ALL OF THE INFORMATION FROM 1-5 ABOVE. NOTE THAT THE PAGE LIMIT IS 15 PAGES.

F. Attachments (Pāku‘ina)

F.1) ATTACH MEMO OR OTHER DOCUMENT(S) FROM ACCREDITING BODY HERE (IF APPLICABLE).

F.2) ATTACH MISCELLANEOUS DOCUMENT(S) HERE.

G.) Academic Affairs

G.1) INITIAL CODE REQUEST TO IRAO G.2) COPY OF THE MEMO FROM THE CHANCELLOR TO THE THE UH SYSTEM VPAA

G.3) PREVIOUS VERSIONS OF THE PROGRAM

H.) Instructions

CERTIFICATE OF ACHIEVEMENT IN STEM EDUCATION

Course
ENG 100 or ESL 100
MATH 205
CHEM 161
CHEM 161 L
BIOL 171
BIOL 171L
PHYS 151 OR 170
PHYS 151L OR 170L
ICS 101 OR EE 160
ED 277
ED 284
ED 285
ED 289
ED 290

Prioritized List For STAR GPS - Please list most efficient way for the students to achieve the certificate
(Make certain that any prerequisite courses are listed before the courses that have prerequisites.)

1. ENG 100 or ESL 100
2. MATH 205
3. CHEM 161
4. CHEM 161L
5. ED 277
6. BIOL 171
7. BIOL 171L
8. ICS 101 or EE 160
9. ED 284 Foundations of Inclusion in Teaching
10. ED 285 Classroom Mgt.
11. PHYS 151 or 170
12. PHYS 151L or 170L
13. ED 289 ~~special topics~~ ed psy
14. ED 290 Foundations of Education

Leave blank

Leave blank Ed 289 ed psy

Leave blank