

IRAO OFFICE USE ONLY	
Received	4/5/2016
In Banner	
MTVCOMP/Codeset	
Master Curriculum	
CIP Code	47.0604
Program Code	AS-NSCI-ENGR
Program Description	AS-Natural Science-Engineering

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

[Reset Form](#)

NEW OR MODIFY PROGRAM CODE



New Program Code



Modify Program Code

Date: 2/4/2016

REQUESTOR CONTACT INFORMATION

Name Kathleen Lee Campus Kauai CC
 Title Educational Specialist Email kathleen@hawaii.edu
 Office/Dept Academic Affairs Phone 808-245-8204

NEW PROGRAM CODE TO CREATE

Institution KAU - Kauai CC Campus KAU - Kauai CC
 Level UG - Undergraduate Effective Term Spring 2016

	Code (Max. Characters)	Description	Check if requesting new code:
College	(2) <u>IN</u>	<u>Instructional</u>	<input type="checkbox"/> See Banner form STVCOLL
Department	(4) <u>MS</u>	<u>Math and Science</u>	<input type="checkbox"/> See Banner form STVDEPT
Degree/Certificate	(6) <u>AS</u>	<u>Associate in Science</u>	<input type="checkbox"/> See Banner form STVDEGC
Major	(4) <u>NSCI</u>	<u>Natural Science</u>	<input type="checkbox"/> See Banner form STVMAJR
Concentration	(4) <u>ENGR</u>	<u>Pre-Engineering</u>	<input type="checkbox"/> See Banner form STVMAJR
Minor	(4) _____	_____	<input type="checkbox"/> 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.

2 years

Special Program Designations

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

A B N P T U

Required Terms of Enrollment: Fall Spring Summer Extended

ADDITIONAL COMMENTS

Requesting to add the Pre-Engineering concentration for the Associate in Science in Natural Science. Kauai CC's Program Action Request indicates that Kapiolani CC has the same program. The ENGR code is being used to maintain consistency among the campuses.

Please note that according to the program coordinator, there are a few students who will be graduating with the concentration in Pre-Engineering at the end of Spring 2016.

ATTACHMENTS

BOR Approved: Associate, Bachelor and Graduate Degrees, and sole credential certificates

BOR Meeting Minutes & Supporting Documents Curriculum

Chancellor Approved: Certificates related to authorized BOR program & Associate in Technical Studies (ATS) Degree

Memo from Chancellor to notify VPAA about new program Curriculum

For new certificates approved by the Chancellor, the related BOR authorized academic program is:
Associate in Science in Natural Science

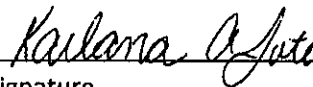
VERIFICATIONS

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

Registrar:

Kailana Soto

Print Name



Signature

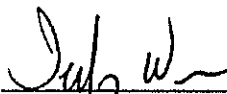
3/1/16

Date

Financial Aid Officer:

Jeff Anderson

Print Name



Signature

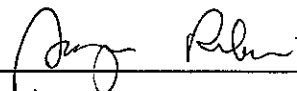
3/2/16

Date

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

Suzette Robinson

Print Name



Signature

3/17/16

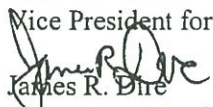
Date




March 3, 2016

MEMORANDUM

TO: Risa E. Dickson
Vice President for Academic Affairs

VIA: 
James R. Dire
Vice Chancellor for Academic Affairs

FROM: Helen A. Cox 
Chancellor

SUBJECT: Curriculum Approval

I have approved the following on 1/4/2016 effective Fall 2016.

New

Automotive Technology:

Certificate of Competence (C.O.) – HEV Diagnostic and Repair
Certificate of Competence (C.O.) – HEV Preventive Maintenance and Repair
Certificate of Achievement (C.A.) – Driveability Technician
Certificate of Achievement (C.A.) – Heavy Line Technician
Certificate of Achievement (C.A.) – Automotive Green Technology

Fitness Professional:

Academic Subject Certificate (A.S.C.) – Fitness Professional

Geographic Information Systems:

Certificate of Competence (C.O.) – Geographic Information Systems
Certificate of Competence (C.O.) – Advanced Geographic Information Systems

Natural Science (Associate in Science):

Concentration – Pre-Engineering*

*This program is effective Spring 2016.

Memorandum to Vice President for Academic Affairs Risa E. Dickson
March 3, 2016
Page 2

Program certificate/title change

Automotive Technology:

Certificate of Achievement (C.A.) – Electronics/Computer Control Specialist (previously
Certificate of Competence)

Certificate of Achievement (C.A.) – Master Automobile Service Technology (previously
Automotive Technology)

Removal of certificate/program

Natural Science (Associate in Science):

Concentration – Plant Biology and Tropical Agriculture

kl

c Division Chairs
 Tammie Napoleon
 Gordon Talbo
 Brian Yamamoto

VCAA Office Use Only	
Effective Fall	_____
Date Approved	_____
Replaces	_____

**Kaua'i Community College
University of Hawai'i
Program Action Request**

1. **Type of Program Action:** New Modification Deletion

PROPOSED	ASNS Pre-Engineering
Arts (DA), Humanities (DH), and Literature (DL): Required SP 251 (DA) (3) Humanities (DH) or Literature (DL) course (3)	6
Chemistry: (Two courses and two labs) CHEM 161 (DP), CHEM 161L (DY), CHEM 162 (DP), CHEM 162L (DY)	8
Electives: ASTR 110; BIOL 171, BIOL 171L, BIOL 172, BIOL 172L; EE 213**, EE 260**, EE 296**; ICS 111**; MATH 100; MICR 130, MICR 140; OCN 201; PHYS 151, PHYS 151L, PHYS 152, PHYS 152L; ZOOL 141, ZOOL 141L, ZOOL 142, ZOOL 142L **Strongly suggested	3
Global and Multicultural Perspectives (FG): (Two courses from different groups) Group A courses cover the time period prehistory to 1500 Group B courses cover the time period 1500 to modern times Group C courses cover the time period prehistory to modern times	6
Pre-Engineering: EE 160, EE 211; MATH 206, MATH 231, MATH 232; PHYS 170, PHYS 170L, PHYS 272, PHYS 272L	27
Social Sciences (DS): ECON 130 or ECON 131	3
Symbolic Reasoning (FS): MATH 205	4
Written Communication (FW): ENG 100	3
Total	60

2. **Program Type:**

- | | |
|--|---|
| <input type="checkbox"/> Associate in Applied Science (AAS) | <input type="checkbox"/> Certificate of Achievement (CA) |
| <input type="checkbox"/> Associate in Arts (AA) | <input type="checkbox"/> Certificate of Competence (CO) |
| <input type="checkbox"/> Associate in Arts–Concentration | <input type="checkbox"/> Academic Subject Certificate (ASC) |
| <input type="checkbox"/> Associate in Science (AS) | |
| <input checked="" type="checkbox"/> Associate in Science Natural Sciences–Concentration (ASNS) | |

3. **Program Title:** Associate in Science in Natural Science with a Pre-Engineering concentration

4. Program Description (for catalog):

The ASNS program with a pre-engineering concentration provides the first two years of an engineering student's education, preparing the student for continued study in a baccalaureate degree program. The courses provide the student with a strong science and math background regardless of the chosen field of engineering, as well as many of the required general education core requirements. Most of the courses are required by all engineering schools for all fields of engineering.

Program Admission Requirements:

Qualified for MATH 205 and qualified for ENG 100.

Graduation Requirements:

5. List Program Student Learning Outcomes that were approved by the Assessment Committee on 4/8/15.

All graduates of the ASNS pre-engineering program are expected to have demonstrated:

1. An ability to apply knowledge of mathematics to fundamental chemical and physical science applications
2. An ability to write programs and use computer hardware and software to solve pre-engineering problems.
3. An ability to work in teams on a significant and meaningful design experience or project.
4. An ability to analyze and interpret data.
5. An ability to use modern engineering tools.
6. An ability to communicate effectively using oral, written, and electronic venues.
7. A recognition of the need for life – long learning.

6. Proposed Date of First Offering: Fall 2016 (Students completing all requirements for the ASNS concentration in Pre-Engineering in Spring 2016 will be awarded the certificate.)

7. Is this program offered at another UH campus? Yes No

If **Yes**, specify campus. If **No**, why is this program offered at KCC:

Kapi'olani Community College

8. Reason for this Program Action:

An engineering pathway that articulates to UH Mānoa is needed as labor statistics indicate a shortage of engineers on Kaua'i, and no pathway/degree program presently exists on Kaua'i or within the community college distance learning offerings.

9. Board of Regents Approval Needed: Yes No

10. Indicate the number of semesters required to complete each certificate and degree.

Certificate/Degree	Number of Semesters
ASNS Pre-Engineering	4

11. Program Course Sequencing: Complete one for each certificate/degree if sequencing is not provided with question #1.

Fall Semester 1	
Course Alpha/No.	Credits
Spring Semester 2	
Summer Session	
Fall Semester 3	
Spring Semester 4	

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PROGRAM ACTION REQUEST APPROVAL

PROGRAM: Associate in Science in Natural Science with a Pre-Engineering concentration

Effective date: Fall 2016

PSLOs Approved by: _____
Assessment Committee Chairperson Date

Proposed by: _____
Originator Date

Requested by: _____
Department/Division Chairperson Date

Approved by: _____
Curriculum Committee Chairperson Date

Vice Chancellor for Academic Affairs Date

Chancellor Date

TRANSFER INFORMATION FOR ASSOCIATE IN SCIENCE IN NATURAL SCIENCE WITH A PRE-ENGINEERING CONCENTRATION

Effective: Fall 2016

NOTES FOR PROPOSED PROGRAM

CE 270 may be substituted for EE 211..

CE 270, CE 271, or ME 213 are also highly recommended and may be substituted for EE 213, EE 260, EE 296, or ICS 111.

The following courses are offered at other campuses and may fulfill the Electives category: BIOC 241; BIOL 265, or BIOL 265L.

Graduation Requirements:

Students must have completed ENG 100, MATH 241, MATH 242, PHYS 170, PHYS 170L, CHEM 161, CHEM 161L, and CHEM 162 or their equivalents and have an overall cumulative GPA of 3.0 or higher in order to transfer into an engineering major at the University of Hawai'i at Mānoa.