

IRAO OFFICE USE ONLY	
Received	3/14/17
In Banner	
MTVCOMP/Codeset	
Master Curriculum	
CIP Code	
Program Code	
Program Description	

**Reset Form**

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

# NEW OR MODIFY PROGRAM CODE

**New Program Code**       **Modify Program Code**      Date: 1/24/17

**REQUESTOR CONTACT INFORMATION**

Name	<u>Debie Amby</u>	Campus	<u>UH Maui College</u> <input type="button" value="v"/>
Title	<u>Banner/Curriculum Specialist</u>	Email	<u>debie@hawaii.edu</u>
Office/Dept	<u>Academic Affairs</u>	Phone	<u>808-984-3378</u>

**NEW PROGRAM CODE TO CREATE**

Institution	<u>MAU - UH Maui College</u> <input type="button" value="v"/>	Campus	<u>MAU - UH Maui College</u> <input type="button" value="v"/>
Level	<u>UG - Undergraduate</u> <input type="button" value="v"/>	Effective Term	<u>Fall 2017</u>

	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>LBRT</u>	<u>Liberal Arts</u>	<input type="checkbox"/> See Banner form STVDEPT
Degree/Certificate	(6) <u>AS</u>	<u>Associates 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>Engineering</u>	<input checked="" type="checkbox"/> See Banner form STVMAJR
Minor	(4) _____	_____	<input type="checkbox"/> See Banner form STVMAJR

AS-NSCI-BSC, AS-NSCI-PSC

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:  
**This new concentration is designed for students intending to transfer to baccalaureate degree programs in engineering, particularly at the University of Hawaii at Manoa College of Engineering.**

Is this major/concentration code being used the same way at the other UH campuses?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Should this program be available for applicants to select as their planned course of study on the online application? <i>If yes, student may select the code as their only program of study.</i>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> 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?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Is this program/major/certificate financial aid eligible?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Does this certificate qualify as a Gainful Employment Program (Title IV-eligible certificate program)? <i>See <a href="http://www.ifap.ed.gov/GainfulEmploymentInfo/index.html">http://www.ifap.ed.gov/GainfulEmploymentInfo/index.html</a></i>	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

**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.*

\_\_\_\_\_ 2.0 y

**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

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 - Natural Science

VERIFICATIONS

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

**Registrar:**

Flora Mora



1/30/17

Print Name

Signature

Date

**Financial Aid Officer:**

Davileigh Naeole



4/30/17

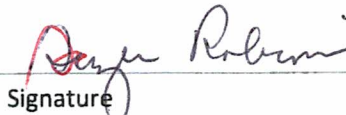
Print Name

Signature

Date

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

Suzette Robinson



3/14/17

Print Name

Signature

Date






UNIVERSITY of HAWAII\*  
**MAUI COLLEGE**

February 1, 2017

**MEMORANDUM**

TO: Risa E. Dickson  
Vice President for Academic Planning and Policy

FROM: Lui K. Hokoana  
Chancellor 

SUBJECT: Program and Subject Code Action at UH Maui College

I have approved the following program and subject code actions so that the necessary codes can be established in Banner.

If you have any questions or concerns, please let me know. Thank you for your assistance.

**NEW PROGRAM CODES**

AS-NSCI-ENGR (Engineering) Effective Term Fall 2017

**NEW PROGRAM CODES FOR INITIAL EXPLORATORY SET-UP AT CAMPUSES**

**All Effective Term Fall 2017**

AA-LBRT-EXAH (Exploratory Arts & Humanities)

AA-LBRT-EXB (Exploratory Business)

AA-LBRT-EXED ( Exploratory Education)

AA-LBRT-EXHS (Exploratory Health Sciences)

AA-LBRT-EXSS (Exploratory Social Sciences)

AA-LBRT-EXST (Exploratory Science, Technology, Engineering & Mathematics)

**NEW SUBJECT CODE**

Electrical Engineering (EE) Effective Spring 2017.

- c: **Pearl Iboshi, Director of IRAO**
- Suzette Robinson, UHCC Director of Academic Programs**
- John McKee, Vice Chancellor of Academic Affairs**
- Debra Nakama, Vice Chancellor of Student Affairs**
- David Grooms, Interim Assistant Dean of Instruction**
- Kulamanu Ishihara, Assistant Professor, Counseling**



2002-2003  
MetLife Foundation  
Best-Practice College  
Award Recipient



2008  
Bellwether  
Award Recipient



2009  
President's  
Higher  
Education  
Community  
Service  
Honor Roll

310 W. Ka'ahumanu Avenue  
Kahului, HI 96732-1617  
Telephone: 808 984-3655  
Fax: 808 984-3546  
Website: www.maui.hawaii.edu

An Equal Opportunity/Affirmative  
Action Institution

**Curriculum Proposal Cover Sheet – Program/Degree/Certificate**  
*Routing procedure – Official Signatures on Signature Page*

Program Name: ASNS  
or  
Course Alpha & Number: Engineering concentration  
Author: Elisabeth Dubuit

Proposal Type:	
<input checked="" type="checkbox"/>	Addition
<input type="checkbox"/>	Modification
<input type="checkbox"/>	Deletion

**Date of Activity:**

Edubuit Author Signature 10/14/16

AK 10/20/2016 Curriculum Representative Signature

[Signature] Department Chair Signature 10/14/16

\_\_\_\_\_ Curriculum Chair Signature

\_\_\_\_\_ Proposals Posted in Website for General Review

12/20/16 Academic Senate Chair Signature

12/22/16 Chief Academic Officer Signature

12/22/16 Chancellor Signature

\_\_\_\_\_ NEW DEGREES ONLY! Chief Academic Officers Approval

\_\_\_\_\_ NEW DEGREES ONLY! Board of Regents Approval

\_\_\_\_\_ Signature Sheet Returned to Curriculum Chair

**Distribution, Posting and Follow-Up:**

\_\_\_\_\_ Notify Proposers of Approval

\_\_\_\_\_ Banner & IRO Input

\_\_\_\_\_ Catalog Input Complete

\_\_\_\_\_ Articulation Forms Forwarded to Articulation Coordinator

\_\_\_\_\_ Five-Year Review Database Updated

\_\_\_\_\_ Originals Filed in Chief Academic Officer's Office

\_\_\_\_\_ Registrar & Counseling Notified

2016.06

Curriculum proposal number \_\_\_\_\_

University of Hawaii Maui College  
Curriculum Action Request (CAR) Form  
Program/Degree/Certificate

For Banner use	
Req:	Rcv
Alpha	
Program name	
Program Code	
Concentration	
Major Code	

1. Author(s): Elisabeth Dubuit

2. Department: STEM

Program: Natural Science Engineering

3. Date submitted to Curriculum Committee: October 2016

4. Program proposal

New program (attach program proposal and program map)  Change of name to existing program

Existing program Title:

Proposed program Title:

5. Credential (degree or certificate) proposal

New credential added to existing program  Modification to existing credential

Type of credential

Degree:  AA  AS  AAS

Certificate:  CA  CC  CO  ASC

Other, specify:

Existing credential: Title:

Credits

Proposed credential: Title: ASNS Engineering

Credits: 60-62

If modification, describe change:

- Change in credential name
- Change in course requirement(s); specify:
- Change in prerequisite(s) for credential; specify:
- Other; specify:

Program map must be attached. (For modifications, write changes on copy of current catalog map)

6. Reason for this curriculum action:

This new concentration is designed for students intending to transfer to baccalaureate degree programs in engineering at four-year institutions, in particular to the University of Hawaii at Manoa College of Engineering.

7. Proposed term of first offering: fall semester of 2017 year.

8. Special fees required:  no  yes, explain:

9. Special resources (personnel, supplies, etc.) required:  no  yes, explain:

10. Special scheduling considerations:  no  yes, explain: Avoid scheduling conflicts among STEM courses (Math, physics, and chemistry)

11. Which program SLOs does this certificate support? (list all that apply and explain, if necessary.)

- Program SLO 1: explain the natural and technological world using reflection and quantitative analysis including preparation of a plan to collect, process, and interpret data; evaluation of the plan, procedures, and findings; and communication of the conclusions Explain:
- Program SLO 2: explain scientific knowledge and understanding to different audiences for a range of purposes Explain:
- Program SLO 3: apply scientific knowledge, skills, and understandings to problems and issues in daily life Explain:

12. Current UHMC Catalog needs revision on page(s):  
10: add Engineering concentration after Natural Science  
22-23: add description and program map for ASNS in Engineering  
26: add Engineering concentration after Natural Science in "at a Glance".

13. Additional Information:

2016.06

Associate in Science – Natural Science – Engineering

FALL 1		SPRING 1	
ENG 100	3	DS <sup>1,4,5</sup>	3
MATH 205	4	MATH 206	4
CHEM 161/L	4	CHEM 162/L	4
FG <sup>1</sup>	3	EE 160	4
	14		15
FALL 2		SPRING 2	
PHYS 170	5	PHYS 272	4
MATH 231	3	MATH 232	3
DA/DH/DL <sup>1,3,5</sup>	3	FG <sup>1</sup>	3
Engineering Elective <sup>2</sup>	4	EE 211	4
		Engineering Elective <sup>2</sup>	3
	15		17

<sup>1</sup> Two WIs are required for ASNS. <sup>1(one)</sup> indicates the courses with WI option.

<sup>2</sup> Engineering Elective may be taken with lab for additional credits.

<sup>3</sup> SP 251 (DA) is a requirement for students admitted to the College of Engineering at UH Manoa.

<sup>4</sup> ECON 120, 130 or 131 (DS) is a requirement for students admitted to the College of Engineering at UH Manoa.

<sup>5</sup> Students planning to transfer should consult an academic counselor for additional requirements.





UNIVERSITY OF HAWAII  
**MAUI COLLEGE**

2016.06

## Associate in Science (AS) in Natural Science Engineering

Student Name \_\_\_\_\_

ID: \_\_\_\_\_

Date: \_\_\_\_\_

COMPASS MATH: \_\_\_\_\_

ENG: \_\_\_\_\_

IMPORTANT NOTES						
<ul style="list-style-type: none"> <li>Program Coordinator: Buddhi Rai (808) 984-3207   buddhi.raihawaii.edu   142 Science Building 'Ike Le'a</li> <li>Students planning to transfer should consult an academic counselor.</li> <li>For UH Mānoa or West O'ahu transfer, consider BOT 105, HWST 107 or PACS 108 to meet Hawaiian, Asian &amp; Pacific Issues HAP requirement.</li> <li>Check graduation application deadline in academic calendar</li> <li>It is recommended that you meet with an Academic Counselor at least once a semester to ensure that you are fulfilling the degree requirements</li> <li>Students are responsible for meeting your program and graduation requirements</li> <li>Contact the Counseling Department at the Ho'okipa Building or call (808) 984-3306 to schedule an advising appointment.</li> </ul>						
GRADUATION REQUIREMENTS						
<input type="checkbox"/> Minimum Applicable: 60 Credits, 100-level or higher <input type="checkbox"/> Minimum Cumulative GPA: 2.0 <input type="checkbox"/> Minimum 12 credits must be earned at UHMC toward AS						
<input type="checkbox"/> 1st (WI) Writing Intensive Course						
<input type="checkbox"/> 2nd (WI) Writing Intensive Course						
Note: Third WI is suggested for UH Manoa transfer.						
GENERAL EDUCATION REQUIREMENTS (19 credits)		CODE	COURSE	CREDIT(S)	GRADE	SEM/YR
<b>Foundation Written Communication</b> ENG 100 Composition I		FW	ENG 100	3		
<b>Quantative Reasoning (4 credits)</b> MATH 205 Calculus I		FS	MATH 205	4		
<b>Global Multicultural Perspective (6 credits)</b> Group A: (Before 1500 CE) HIST 151 Group B: (Since 1500 CE) HIST 152, GEOG 102, SSM 101 (effective SP15) Group C: (Pre-history to Present) MUS 107, REL 150		FG__		3		
		FG__		3		
<b>Arts (DA), Humanities (DH), and Literatures (DL) - Choose one course</b> Diversification Arts (DA) - ART 101, 105, 107D, 113, 115, 123B, 123C, 123D, 161 (x-listed as ICS 161), 205 (x-listed as ICS 205), 218 (x-listed as ICS 261), 221 (x-listed as ICS 214), 223, 243, 244; BUS 130 (x-listed as COM 130), COM 130 (x-listed as BUS 130), DRAM 101, 221, 222, 260, 280; ENG 104, HAW 104, HWST 205A, 205E, 205I, 222; ICS 161 (x-listed as ART 161), 205 (x-listed as ART 205), 261 (x-listed as ART 218), 214 (x-listed as ART 221); MUS 108, 114, 114H, 121C, 121D, 121F, 121G, 121Z, 122C, 122D, 123, 124, 132, 180, 203, 216, 253, SP 151, 231, 251*; TCOM 261 Note (*): SP 251 is a requirement for students admitted to the College of Engineering at UH Manoa Diversification Humanities (DH) - ANTH 235 (x-listed as HIST 288); ART 270, HIST 241, 242, 253, 281, 282, 284, 288 (x-listed as Anth 235); HUM 100, 400; HWST 100B, 100C, 100D, 107, 111, 176, 207, 213, 231, 262, 270, 286, 291; LING 102, MUS 106, 167, 176, 271, 272, PHIL 100, 101, 102, 109, 301, 323, SPAN 180V Diversification Literatures (DL) - ENG 209, 210, 250, 251, 252, 253, 254, 255, 256, 257, 257E, 257F, 257R; FIL 261, HAW 261, 262		DA or DH or DL		3		
<b>Social Science Elective (3 credits) - Choose one course</b> Diversification Social Sciences (DS) - ANTH 150, 165, 200, 210, 225, 281, BOT 105 (x-listed as HWST 211); COM 145, 210, 215, 353, 459; ECON 120*, 130*, 131*, 150; FAMR 230, 244; GEOG 122, 151; HWST 211 (x-listed as BOT 105); PACS 108; POLS 110, 120, 180; PSY 100, 103, 170, 202, 212, 213, 240, 250, 251, 253, 260, 353; SOC 100, 218, 231, 251; SSM 401 Note (*): ECON 120, 130 or 131 is a requirement for students admitted to the College of Engineering at UH Manoa		DS		3		



CHEMISTRY REQUIREMENTS (8 credits)		CODE	COURSE	CREDIT(S)	GRADE	SEM/YR
CHEM 161	Prereq: ENG 22 or 24 with grade C or better or higher math (PHYS 113 and V&V with grade C or better or higher placement or pass MATH 133 or higher) (Chem 161L)	DP		3		
CHEM 161L	Co-req: CHEM 161	DY		1		
CHEM 162	Prereq: CHEM 161 or pass MATH 133 or higher (Chem 162L)	DP		3		
CHEM 162L	Co-req: CHEM 162	DY		1		
ENGINEERING REQUIREMENTS (27 credits)		CODE	COURSE	CREDIT(S)	GRADE	SEM/YR
EE 160	Programming for Engineers (Prereq: MATH 140)			4		
MATH 206	Calculus II (Prereq: MATH 206 with grade C or better or consent)	FS		4		
PHYS 170	General Physics I (Prereq: MATH 206)	DP/DY		5		
PHYS 272	General Physics II (Prereq: PHYS 170 with grade C or better or MATH 206)	DP/DY		4		
MATH 231	Calculus III (Prereq: MATH 206 with grade C or better, or consent)	FS		3		
MATH 232	Calculus IV (Prereq: MATH 231 with grade C or better, or consent)	FS		3		
EE 211	Basic Circuit Analysis I (Prereq: MATH 206 with grade C or better, or consent)			4		
ENGINEERING CONCENTRATION ELECTIVES		CODE	COURSE	CREDIT(S)	GRADE	SEM/YR
(to meet minimum 60 credits of course work 100-level or higher, and other graduation requirements if not satisfied previously.)						
AG 122 (3), 265 (4); ASTR 110 (3), 110L (1); BIOC 241 (3), 244 (3); BIOL 100 (3), 101(4), 102 (4), 103 (4), 105 (4), 124 (3), 124L (1), 151 (3), 152 (3), 200 (4), 225 (4), 226 (5), 265 (3), 282 (3), 331 (3), 424 (3); BOT 101 (4); CHEM 272 (3), 272L (1), 273 (3), 273L (1); GIS/ICS 150 (4), 180 (4), GG 101 (4), 103 (3); ICS 110 (3), 111 (4); MATH 103 (3), 115 (3), 135 (3), 140(3); MICR 130 (3), 140 (2); OCN 201 (3), 201L (1), 250 (3); PHYS 151 (4), 152 (4); PHRM 203 (3); SSM 101 (3), 201 (3), 202 (3), 275 (3), 301 (3), 302 (3), 375 (3), 402 (3); ZOOL 101 (4), 141 (4), 142 (4), 200 (4); any course listed under the DA, DH, DL, DS diversification designations						
Note: Civil Engineering majors at UHM require DB. DB is not required for Mechanical, Electrical, and Computer Engineering majors. DB options: AG 122 (3), 265 (4); BIOL 100 (3), 101(4), 102 (4), 103 (4), 105 (4), 124 (3), 124L (1), 151 (3), 152 (3), 200 (4), 225 (4), 226 (5), 265 (3), 282 (3), 331 (3), 424 (3); BOT 101 (4); GG 101 (4), 103 (3); MICR 130 (3), 140 (2); PHRM 203 (3); ZOOL 101 (4), 141 (4), 142 (4), 200 (4)						

Attaining Degree  AS in \_\_\_\_\_

Expected Graduation  FA  SP  SU

Cumulative GPA \_\_\_\_\_ as of \_\_\_\_\_

UHMC Credit Hours \_\_\_\_\_

Credits in Progress \_\_\_\_\_  POST ONLY

Counselor's Signature \_\_\_\_\_

Date \_\_\_\_\_

**Offerings at UH Maui College**

The College provides general education for both transfer and career students. Lower division courses (i.e., with 100-299 numbers) are offered to meet general education requirements at four-year colleges, although students should meet with a counselor for specifics.

The College also provides lower division courses for many arts and science majors, as well as courses to meet pre-professional requirements. The Liberal Arts curricula include courses that lead to Academic Subject Certificates (ASC) and degrees in the Associate of Arts (AA).

Career curricula include career-technical, public service, and business programs that lead to Certificates of Professional Development (CPD), Certificates of Competence (CO), Certificates of Achievement (CA), and degrees in the Associate in Science (AS), Associate in Applied Science (AAS), Associate in Technical Studies (ATS), and Bachelor of Applied Science (BAS). These certificates and degrees are designed to prepare students for immediate employment or career advancement. The College also provides instruction for apprentices in the construction trades.

Programs	CPD	CO	CA	AAS	AS	ASC	AA	BAS
Accounting			✓	✓				
Administration of Justice		✓	✓	✓				
Agriculture and Natural Resources		✓	✓					
Horticulture & Landscape Maintenance		✓	✓	✓				
Turf grass		✓						
Nursery Management		✓	✓					
Sustainable Tropical Crop Management		✓	✓	✓				
Auto Body Repair and Painting		✓	✓	✓				
Automotive Technology	✓	✓	✓	✓				
Business Careers	✓	✓	✓	✓				
Business Technology		✓	✓	✓				
Information Processing Specialty				✓				
Medical Assistant I, II		✓		✓				
Construction Technology	✓	✓	✓	✓				
Creative Media					✓			
Culinary Arts		✓	✓	✓				
Baking		✓		✓				
Dental Assisting		✓						
Dental Hygiene					✓			
Early Childhood Education		✓	✓		✓			
Electronic & Computer Engineering Technology		✓	✓		✓			
Information Security Specialist		✓	✓					
Fashion Technology		✓	✓	✓				
Hospitality & Tourism		✓	✓	✓				
Human Services		✓	✓		✓			
Community Health Worker/Health Navigator I		✓						
Substance Abuse Counseling		✓	✓		✓			
Nursing Career Ladder								
Nurse- Practical			✓					
Nurse- Registered					✓			
Nurse Aide		✓						
Pre Nurse Certificates	✓	✓						
Liberal Arts							✓	
Hawaiian Studies						✓	✓	
Natural Science					✓			
Applied Business & Information Technology								✓
Engineering Technology								✓
Sustainable Science Management		✓						✓
Marine Option Program	✓	✓				✓		
Visual Arts						✓		
Hawaiian Music						✓		
Music Studies						✓		

Please add the 4 NS tracks under Natural Science  
 -Biological Science  
 -Physical Science  
 -Engineering  
 -Information & Communication Technology



2016.06

Please add the 4 ASNS tracks and program maps for each.

**Natural Science**

The Associate in Science degree in Natural Science (ASNS) provides a comprehensive background in science and math courses and is designed specifically for students who are planning to transfer to baccalaureate degree programs in science, technology, engineering, or mathematics (STEM). Students may choose to concentrate in Biological Science, Physical Science, or Info & Communication Technology.

Please add Engineering

Associate in Science Degree in Natural Science (ASNS)					
Name: Last, First, Middle Initial			UH ID Number		
<b>Graduation Requirements</b>					
CREDITS					
<input type="checkbox"/> Minimum Applicable: 60 credits, 100-level or higher					
GRADES					
<input type="checkbox"/> Minimum Cumulative GPA: 2.0					
RESIDENCY					
<input type="checkbox"/> Minimum UHMC: 12 credits					
WRITING INTENSIVE (WI): Two courses					
<input type="checkbox"/> 1 _____					
<input type="checkbox"/> 2 _____					
<b>English: 6 credits</b>					
ENG 100 3					
Choose at least one course(3): ENG 106, ENG 209, ENG 210, ENG 225, SP 151, SP 251.					
<b>Quantative Reasoning: 4 credits</b>					
MATH 205 4					
<b>Humanities Elective: 3 credits</b>					
Choose at least one course from the following(3): ANTH 235, ART, BUS/COM 130 DNCE, DRAM, EALA, ENG 104, ENG 250, 257, FIL, HAW, HWST (except 211), HIST, HUM, ILO, JPNS, LING, MUS, PHRM 203, PHIL, REL, SPAN, SP, SSM 101, 201, 202.					
<b>Natural Science Electives: 8 credits</b>					
CHEM 16 3					
CHEM 161L 1					
Electives 4 selected from this list: AG 122, 174, 200, 265, ANTH 215, ASTR, BIOC, BIOL, BOT 101, FSHN, GEOG 101, 101L, GG, MICR, OCN 201, 201L, PHRM 203, PHYS, SCI, SSM 101, 201, 202, ZOOL.					
<b>Social Science Electives: 3 credits</b>					
Choose at least one course from the following(3): ANTH (except 201L, 215 & 225), BOT 105, COM (except BUS, COM 130), ECON, FAMR 230, GEOG (except 101, 101L), HWST 211, PACS, POLS, PSY, SSCI, SOC.					
<b>Additional ASNS Requirements: Biological 7-8 credits; Physical 7 credits</b>					
CHEM 162(3)					
CHEM 162L(1)					
ICS 101(3); GIS ICS 150 4, 130 4) or other with approval					
Continue next page with specific concentration					



<b>Biological Science Concentration: 29-31 credits</b>		Course	Credits	Grade	Semester	Year
	BIOL 171(3)					
	BIOL 171L(1)					
	BIOL 172(3)					
	BIOL 172L(1)					
	PHYS 151(4) or 170(5)					
	PHYS 152(4) or 272(4)					
<b>Biological Concentration electives: 13-14 credits</b>						
If not taken for Natural Science elective, choose from: AG 122(3), 174(3), 200(4), 265(4); ANTH 210(3), 210L(1), 215(3); AQUA 362, 466; ASTR 110(3), 110L(1); BIOL 241(3), 244(3); BIOL 100(3), 101(4), 102(4), 103(4), 105(4), 124(3), 124L(1), 151(3), 152(3), 200(4), 225(4), 226(5), 265(3), 282(3), 361(3), 424(3); BOT 101(4); FSHN 185(3), 285(3), 286(3); GEOG 101(3), 101L(1); GG 101(4), 103(3); GIS/ACS 150(4), 180(4); MATH 206(4), 231(3), 232(3); MICR 130(3), 140(2); OCN 201(3), 201L(1), 250(3), 351; PHRM 203(3); SCI 121(4), 122(3); SSM 101(3), 201(3), 202(3); ZOOL 101(4), 141(4), 142(4), 200(4);						
1						
2						
3						
4						
5						
6						
<b>Physical Science Concentration: 30 credits</b>		Course	Credits	Grade	Semester	Year
	MATH 206(4)					
	PHYS 170(5)					
	PHYS 272(4)					
<b>Physical Science Concentration electives: 17 credits *Recommended</b>						
If not taken for Natural Science elective, choose from: AG 122(3), 174(3), 200(4), 265(4); ANTH 210(3), 210L(1), 215(3); AQUA 362, 466; ASTR 110(3), 110L(1); BIOL 241(3), 244(3); BIOL 100(3), 101(4), 102(4), 103(4), 105(4), 124(3), 124L(1), 151(3), 152(3), 171(3), 171L(1), 172(3), 172L(1), 200(4), 225(4), 226(5), 265(3), 282(3), 361(3), 424(3); BOT 101(4); FSHN 185(3), 285(3), 286(3); GEOG 101(3), 101L(1); GIS/ACS 150(4), 180(4); GG 101(4), 103(3); MATH 231(3), 232(3); MICR 130(3), 140(2); OCN 201(3), 201L(1), 250(3), 351; PHRM 203(3); SCI 121(4), 122(4); SSM 101(3), 201(3), 202(3); ZOOL 101(4), 141(4), 142(4), 200(4);						
1						
2						
3						
4						
5						
6						
<b>Information &amp; Communication Technology Concentration: 29 Credits</b>		Course	Credits	Grade	Semester	Year
	ICS 111(4)					
	ICS 141(3)					
	ICS 211(4)					
	ICS 212(3)					
	ICS 241(3)					
	Electives (12 credits): ICS 110(3), ICS 169(3), ICS 184(3), ICS 171(3), ICS 281(3), ICS 282(3) plus any Physical Science Concentration electives.					
1						
2						
3						
4						

Add Engineering in Highlighted yellow area

### Career & Technical Education

Career and Technical Education (CTE) programs offer the Associate in Science (AS) degree or the Associate in Applied Science (AAS) degree. Additionally, there is a customized degree opportunity, the Associate in Technical Studies (ATS).

#### Associate in Science

The Associate in Science (AS), a two year degree consisting of at least 60 credits entirely at the college level (100-level or above), provides students with skills and competencies for gainful employment.

##### At a Glance

#### Associate in Science (AS)

- Creative Media
- Dental Hygiene
- Early Childhood Education
- Electronic & Computer Engineering Technology
- Human Services
  - General Human Services
  - Substance Abuse Specialty
- Natural Science
- Biological Science
- Physical Science
- Information & Communications Tech
- Registered Nurse

Handwritten note: *Engineering* with an arrow pointing to the 'Information & Communications Tech' category.

#### Associate in Applied Science

The Associate in Applied Science (AAS), a 2-year degree consisting of at least 60 credits entirely at the college 100-level or above, provides students with skills and competencies for gainful employment. While this degree is not designed for transfer directly into a baccalaureate program, some AAS programs have agreements with baccalaureate degree-granting institutions, and some AAS programs may include some baccalaureate-level course offerings.

#### AS and AAS Requirements

1. **Satisfactory Completion of a CTE Major:**  
Specific courses for each major are described later in this section.
2. **General Education:**
  - a. **Quantitative Reasoning: 3 credits**  
3 credits minimum.

*Refer to Program Maps for program mathematics requirements. Graduation Requirement: If students seek to apply Philosophy 110 to fulfill the AS or AAS degree requirement in Quantitative Reasoning, students must place into Mathematics 100 or higher.*

- b. **English/Communication: 6 credits**  
6 credits in English 100, 102, 104, 106, 209, 210; Learning Skills 110; Journalism 205; Speech 151, 251; Communication 145, 210; or Communication/Business 130. 3 credits of the 6 must be ENG 100 or ENG 106.

*Nursing AS requires ENG 100(3) only. English courses numbered 250 or above meet Humanities requirements only.*

- c. **Elective credits-AS: 12 credits**  
**Elective credits-AAS: 9 credits**  
At least one 100-level course each from Humanities, Natural Science, and Social Science listed below. *For the AS degree and the AAS degrees that have 12 General Education elective credits, the remaining 3 elective credits may be selected from any area with the exceptions that: CTE majors may not select electives from CTE courses, and Business majors may not select electives from Business courses.*

##### Humanities:

Anthropology 235, Art/ICS 161, 205, Art, Business/Communication 130, Dance, Drama, East Asian Languages, English 104, 106, 209, 210, 250-257, Hawaiian, Filipino, Hawaiian Studies (except 211), History, Humanities, ICS 161, 205, Ilokano, Japanese, Linguistics, Music, Philosophy, Religion, Spanish, Speech, Telecommunications 261.

##### Natural Science:

Agriculture 122, 174, 200, 253, 265; Anthropology 210L, 215; Aqua; Astronomy 110, 110L; Biochemistry; Biology; Botany 101, 105L; Chemistry; Food Science & Human Nutrition 185, 285; Geography 101 & 101L; Geology & Geophysics; Hawaiian Studies 211L; Microbiology; Oceanography 201, 201L; Pharmacology 203; Physics; Science; Zoology SSM 201.202.

##### Social Science:

Anthropology (except 201L, 215, & 235); Botany 105; Communications (except 130); Economics; Family Resources 230, 244; Geography (except 101, 101L); Hawaiian Studies 211; Pacific Island Studies 108, Political Science; Psychology; Social Science; Sociology.

3. **Minimum of 60 credits:**  
These maximums may be applied:
  - a. 9 credits Cooperative Education;
  - b. 30 credits with CR grade.*Interdisciplinary Studies courses may be applied. 60 credits for the AS degree must be at the 100-level or above.*
4. **Grade Point Average:**  
2.0 (C) or better.
5. **Residency Requirement:**  
12 credits toward a major must be earned at UH Maui College. The residency requirement may be waived for cause or credit-by-examination used with approval of the Vice Chancellor of Academic Affairs.
6. **Graduation Requirement:**  
To be awarded the AS or the AAS degree, students must complete an Application for Graduation form obtained from Student Services. *See Academic Calendar for deadline.*

##### At a Glance

#### Associate in Applied Science (AAS)

- Accounting
- Administration of Justice
- Agriculture & Natural Resources
  - Horticulture & Landscape Maint
  - Sustainable Tropical Crop Mgt
- Auto Body Repair & Painting
- Automotive Technology
- Business Careers
- Business Technology
  - Information Processing
  - Medical Assistant II
- Construction Technology
- Culinary Arts
  - Baking
  - Culinary Arts
- Fashion Technology
- Hospitality & Tourism

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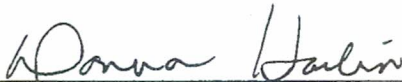
University of Hawaii Maui College  
Curriculum Action Request (CAR) Signature Page



10/17/2016

Proposed by: Author or Program Coordinator

Date



10/20/2016

Checked by: Academic Subject Area Representative to Curriculum Committee

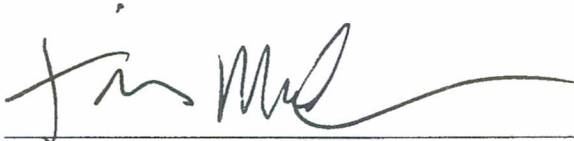
Date



10/14/16

Requested by Department: Department Chair

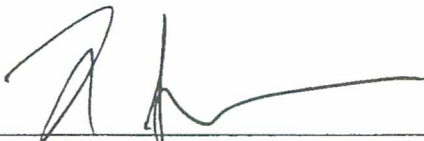
Date



12/19/16

Recommended by: Curriculum Chair

Date



12/20/16

Approved by Academic Senate: Academic Senate Chair

Date



12 22 - 16

Endorsed by: Chief Academic Officer

Date

12/22/16

Approved by: Chancellor

Date