

IRAO OFFICE USE ONLY	
Received	12/15/16
In Banner	
MTVCOMP/Codeset	
Master Curriculum	
CIP Code	
Program Code	
Program Description	

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: 8/29/16

**REQUESTOR CONTACT INFORMATION**

Name Debie Amby Campus UH Maui College  
 Title Banner/Curriculum Specialist Email debie@hawaii.edu  
 Office/Dept Academic Affairs Phone 808-984-3378

**NEW PROGRAM CODE TO CREATE**

Institution MAU - UH Maui College Campus MAU - UH Maui College  
 Level UG - Undergraduate Effective Term Fall 2016

	Code (Max. Characters)	Description	Check if requesting new code:
College	(2) <u>IN</u>	<u>Instructional</u>	<input type="checkbox"/> See Banner form STV COLL
Department	(4) <u>CTEC</u>	<u>Construction Technology</u>	<input checked="" type="checkbox"/> See Banner form STV DEPT
Degree/Certificate	(6) <u>CO</u>	<u>Certificate of Competence</u>	<input type="checkbox"/> See Banner form STV DEGC
Major	(4) <u>CTEC</u>	<u>Construction Technology</u>	<input checked="" type="checkbox"/> See Banner form STV MAJR
Concentration	(4) <u>SUSC</u>	<u>Sustainable Construction Tech</u>	<input type="checkbox"/> See Banner form STV MAJR
Minor	(4) _____	_____	<input type="checkbox"/> See Banner form STV MAJR

**SUSC**

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:

To provide a new certificate option for students to explore various career and technical avenues in sustainability and construction.

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*

1.0 = **30.0000 W**

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

①

ADDITIONAL COMMENTS

[Empty box for 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:

Construction Technology      AAS - CTEC

VERIFICATIONS

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

**Registrar:**

Flora Mora

*Flora Mora*

10/13/16

Print Name

Signature

Date

**Financial Aid Officer:**

Darleigh Nae'ole

*Darleigh Nae'ole*

10/13/16

Print Name

Signature

Date

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

Suzette Robinson

*Suzette Robinson*

12/14/16

Print Name

Signature

Date

**Curriculum Proposal Cover Sheet – Program/Degree/Certificate**

*Routing procedure Official Signatures on Signature Page*

Program Name: (Sustainable) Construction Tech

or

Course Alpha & Number: CO Sustainable Technology

Author: Tim Botkin/Cliff Rutherford

Proposal Type: <input checked="" type="radio"/> Addition <input type="radio"/> Modification <input type="radio"/> Deletion
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**Date of Activity:**

9/20/15 Author Signature

9/28/15 Curriculum Representative Signature

9/28/15 Department Chair Signature

10-5-15 Curriculum Chair Signature

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

1-8-16 Academic Senate Chair Signature

\_\_\_\_\_ Chief Academic Officer Signature

\_\_\_\_\_ 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

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

<i>For Banner use</i>	
<i>Req</i>	<i>Rev</i>
<i>Alpha</i>	
<i>Program name</i>	
<i>Program Code</i>	
<i>Concentration</i>	
<i>Major Code</i>	

1. Author(s): Tim Botkin Clifford Rutherford
2. Department: CTE Program: Sustainable Construction Tech (SUSC)
3. Date submitted to Curriculum Committee: 9 28 15

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:* Certificate of Competence (CO) Sustainable Technology    *Credits:* 11-12

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 certificate prepares students for entry level energy production and sustainable construction design and installation positions and professional development within the fields. Creates a common thread between STEM and the construction trades. To provide a new certificate option for students to explore various career and technical avenues in field of sustainability. This certificate will also create a transition point for students to carry required or elective credits in the transfer of majors from one program to another (SSM and SUSC).

7. Proposed term of first offering: Fall semester of 2016 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:

11. Which program SLOs does this certificate support? (*list all that apply and explain, if necessary.*)  
 Program SLO 1: All    Explain: Please see #13 Additional Information  
 Program SLO 2:    Explain:  
 Program SLO 3:    Explain:

12. Current UHMC Catalog needs revision on page(s): 2015-2016 catalog revisions: p. 28, add CO in Sustainable Technology to SUSC program certificate list; p. 53, program map, add CO in Sustainable Technology with required courses.

13. Additional Information: Certificate of Competence (CO) in Sustainable Technology

Certificate requirements:

- 1) Introduction to Sustainability (3 credits): Either SSM 101(3) OR ENRG 101(3)
- 2) Drafting Construction Skills (2-3 credits): One of the following courses; AEC 80(3), OR BLPR 22(3), OR ICS 161(3); OR MAIN 50(2), 65(2) or 70(2).
- 3) Renewable Energy (3 credits): ENRG 103(3)
- 4) Green Building (3 credits): SSM 201(3)

Total 4 courses. 11-12 credits.

This certificate to be listed in both the SSM and (Sustainable) Construction Technology program maps.

This CO supports all of the SUSC program PLOs

- I. Use and maintain appropriate materials, tools, equipment, and procedures to carry out tasks performed on construction projects according to safety and industry standards.
- II. Use math, computer, and oral and written communication skills to solve construction project problems.
- III. Create and maintain accurate documentation of construction and maintenance projects.
- IV. Describe industry standard Green Building practices in construction and maintenance projects.
- V. Read and interpret blueprints, and or schematics, and specifications to plan projects.
- VI. Demonstrate the craftsmanship standards of dependability, punctuality, and quality.
- VII. Examine and use proper mechanical, electrical, and carpentry codes and standards applicable to construction and repair.

### Sustainable Construction Technology

The Sustainable Construction Technology program prepares students in general building construction and maintenance of large or small structures. It allows students to explore different trades prior to selecting a specialization.

Contact the program coordinator for more information.

#### Requirements for Certificates of Professional Development (CPD):

- Welding for Trades: 2 credits    Welding 19B(1), 19D(1)
- Safety: 2 credits                    Occupational Safety & Health 20(1), Health 31(1)

#### Requirements for Certificates of Competence (CO):

- Basic Carpentry Skills: 6 credits    Blueprint 22(3), Carpentry 20(3)
- Basic Drafting Skills: 6 credits    AEC 80(3), Blueprint 22(3)
- Electrical Maintenance: 5 credits    Electricity 20(3), 23(2)
- Energy Production: 6 credits    Energy 101(3), 103(3)
- Maintenance Painting: 4 credits    Maintenance 20(2), 40(2)
- Maintenance Plumbing: 4 credits    Maintenance 20(2), 50(2)
- Rough & Finish Carpentry: 8 credits    Carpentry 41(3), 43(3), 193v(2)
- Small Equipment Repair: 6 credits    Electricity 23(2), Maintenance 20(2), 60(2)

**CO: Sustainable Technology**  
 Certificate requirements:  
 1) Introduction to Sustainability (3 credits) Either SSM 101(3) OR ENRG 101(3)  
 2) Drafting/Construction Skills (2-3 credits): One of the following courses, AEC 80(3), OR BLPR 22(3), OR ICS 161(3); OR MAIN 50(2), 65(2) or 70(2).  
 3) Renewable Energy (3 credits), ENRG 103(3)  
 4) Green Building (3 credits): SSM 201(3)  
 Total 4 courses, 11-12 credits.

→ \*Crosslisted w other program \*

#### Requirements for Certificate of Competence (CO): 16 credits

- Carpentry 20(3)
- Electricity 20(3)
- Energy 101(3)

- Maintenance 20(2)
- Quantitative Methods 107C(3)
- Health 31(1); Occupational Safety & Health 20(1)

#### Requirements for Certificate of Achievement (CA): 33 credits

- All Sustainable Construction Tech CO courses(16) plus:
- Architectural Engineering & CAD Tech 80(3)
  - Blueprint 22(3)
  - Carpentry 41(3)

- Energy 103(3)
- Maintenance 40(2)
- English 100 or 106(3)\*\*

#### Requirements for Associate in Applied Science (AAS) Degree: 64-67 credits

- All CA courses(33) plus:
- Carpentry 43(3)
  - Electricity 23(2)
  - Maintenance 30(2), 50(2), 60(2), 70(2)
  - Welding 19B(1), 19D(1)
  - Cooperative Education 193v(2) - in the appropriate alpha BUS/COM 130, COM 145, or SP 151

- Humanities elective(3) - 100 or above
- Natural Science elective(3) - except PHYS 50
- Social Science elective(3) - 100 or above
- Technical electives(2-5): Maintenance 65(2), Carpentry 42(3), or other program courses: AEC, BLPR, CARP, ELEC, ENRG, MAIN

#### Full-time students would take courses in this sequence:

First Semester (Fall)	Credits
*CARP 20 Basic Carpentry Skills	3
*ELEC 20 Intro to Electricity	3
*ENRG 101 Intro to Sustainable Technology	3
*HLTH 31 First Aid and Safety	1
*MAIN 20 Intro to Building Maintenance	2
Mathematics 100 or higher, or BUSN 189(3)***	3
*OSH 20 Intro to Occupational Safety & Health I	1
	<u>16</u>
Third Semester (Fall)	
CARP 43 Interior Finish	3
Cooperative Education 193v(2) - in the appropriate alpha	2
MAIN 30 Masonry	2
MAIN 50 Plumbing	2
MAIN 60 Small Equipment Repair	2
WELD 19B and 19D Welding for Trades	1,1
BUS/COM 130, COM 145, or SP 151	3
	<u>16</u>

Second Semester (Spring)	Credits
*AEC 80 Basic Drafting	3
*BLPR 22 Blueprint Reading & Drafting	3
*CARP 41 Rough Carpentry	3
*ENRG 103 Energy Production Systems	3
*MAIN 40 Painting & Decorating	2
*ENG 100 or 106	3
	<u>17</u>
Fourth Semester (Spring)	
ELEC 23 Electrical Wiring I	2
MAIN 70 Preventive Maintenance	2
Technical electives - see electives in AAS requirements above	2-5
Humanities elective	3
Natural Science elective	3
Social Science	3
	<u>15-18</u>

\*Note: Courses required for the Certificate of Achievement.

\*\*Note: ENG 22/55 may be substituted for the Certificate of Achievement for those not going on for the AAS degree.

\*\*\*Note: MATH 22/82 may be substituted for the Certificate of Achievement or Competence for those not going on for the AAS degree.

## Career & Technical Certificates

Chancellor of Academic Affairs each academic year, listing the status of each ATS degree.

The Career & Technical Education program offers three types of certificates based upon the amount of credit required for completion. These three

### Certificate of Achievement

The Certificate of Achievement (CA) is a credential awarded to students who successfully complete designated CTE credit course sequences that provide entry-level skills or job upgrades.

These course sequences shall be at least 24 credits, but may not exceed 51 credits (unless external employment requirements exceed this number).

### CA Requirements

- Satisfactory Completion of a Career & Technical Education**  
**Major:** *Program Maps cite specific program requirements.*
- General Education: 6 credits**  
3 credits in English 19 or higher, and 3 credits in Quantitative Reasoning.
- Grade Point Average:**  
2.0 (C) or better.
- Residency Requirement:**  
At least 12 credits toward the CA must be taken at UH Maui College.
- Application for Graduation:**  
To be awarded a CA, students must complete an *Application for Graduation* form obtained from Student Services. *See Academic Calendar for deadline.*

### At a Glance

#### Certificates of Achievement (CA)

Accounting  
Administration of Justice  
Agriculture & Natural Resources  
Floriculture Management  
Horticultural & Landscape Maint  
Nursery Management  
Sustainable Tropical Crop Mgt  
Auto Body Repair & Painting  
Automotive Technology  
Business Careers  
Business Technology  
Culinary Arts  
Early Childhood Education  
Electronic & Computer Engineering  
Technology  
Fashion Technology  
Hospitality & Tourism  
Human Services  
General Human Services  
Substance Abuse Counseling  
Nursing Career Ladder  
Practical Nurse  
Sustainable Construction Technology

### Certificate of Competence

A Certificate of Competence (CO) is a credential awarded for successfully completing designated short-term credit or non-credit courses that provide job upgrading or entry-level skills. Credit course sequences shall be 4 to 23 credits.

The issuance of a CO requires that students' work has been evaluated and determined to be satisfactory.

Students must earn a GPA of 2.0 or better for all credit courses required in the CO.

### At a Glance

#### Certificates of Competence (CO)

Administration of Justice  
Corrections I, II  
Law Enforcement I, II  
Private Security I, II  
Agriculture and Natural Resources  
Agricultural Science  
GIS in Ecosystem Management  
Landscape Maintenance  
Nursery Production  
Pest Management  
Sustainable Tropical Crop Production  
Turfgrass Maintenance  
Autobody Repair & Painting  
Auto Body Refinishing  
Corrosion  
Automotive Technology  
Brakes  
Business Careers  
e-Marketing  
Entrepreneurship II  
Leadership Training  
Supervision II  
Business Technology  
Basic Office Skills - Pre-Business Tech  
Business Technology  
Medical Assistant I  
Virtual Office Assistant  
Culinary Arts  
Baker's Helper  
Pastry Cook  
Dental Assisting  
Early Childhood Education  
Early Childhood Education  
Early Childhood Option  
Preschool Child Development Associate  
Electronic & Computer Engineering Tech  
Cybersecurity  
Fashion Technology  
Dressmaker  
Fashion-Fabric Salesperson  
Seamstress  
Hospitality & Tourism  
Human Services  
Aging  
Case Management  
Dynamics of Family Violence  
Health Navigator/Cmty Health Worker  
Substance Abuse Counseling I, II, III  
Youth Development Practitioner  
Marine Option Program  
Marine Naturalist I, II  
Nursing Career Ladder  
Nurse Aide Training  
Pharmacy Technician  
Therapeutic Activity Aide I, II  
Sustainable Construction Technology  
Basic Carpentry Skills  
Basic Drafting Skills  
Electrical Maintenance  
Energy Production  
Maintenance Painting  
Maintenance Plumbing  
Rough and Finish Carpentry  
Small Equipment Repair  
Sustainable Technology


Sustainable Science Management  
Sustainable Technology



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

  
Proposed by: Author of Program Coordinator  
9/28/15  
Date

  
Checked by: Academic Subject Area Representative to Curriculum Committee  
9/28/15  
Date

  
Requested by Department: Department Chair  
9/28/15  
Date

  
Recommended by: Curriculum Chair  
10-5-15  
Date

  
Approved by Academic Senate: Academic Senate Chair  
1-8-16  
Date

  
Endorsed by: Chief Academic Officer  
11-23-15  
Date

  
Approved by: Chancellor  
1-8-16  
Date