

UNIVERSITY OF HAWAII
CODE REQUEST FORM FOR ACADEMIC PROGRAM CODES

REQUESTOR CONTACT INFORMATION	
Date: 04/02/2012	Effective term of request (Semester-Year): 201310
Name: Farah Doiguchi	Title: Registrar
Campus: Honolulu Community College	Office/Department: Records Office
Phone: (808) 845-9120	Email: farah@hawaii.edu

1. PROGRAM CODE, MAJOR CODE, CONCENTRATION CODE		Banner forms: SMAPRLE, SOACURR, STVMAJR	
Institution: Honolulu CC (HON)	College: Transportation & Trades	Department: Construction Management	
<input checked="" type="checkbox"/> New program code <input type="checkbox"/> Change/replace existing program code:			
Level: <input checked="" type="checkbox"/> Undergraduate <input type="checkbox"/> Graduate <input type="checkbox"/> First-Professional <input type="checkbox"/> Post-Baccalaureate <input type="checkbox"/> Other:			
Degree: AS		Certificate:	
If requesting an existing Major code and/or Concentration code in Banner:			
Existing Major:		Existing Concentration:	
<small>Code</small>	<small>Description</small>	<small>Code</small>	<small>Description</small>
If requesting a new <input checked="" type="checkbox"/> Major code or <input type="checkbox"/> Concentration code that does not exist in Banner:			
New Code [4 char/space limit]: CM		Description [30 char/space limit]: Construction Management	
If a similar major/concentration code exists in Banner, please list the code:			
Is this major/concentration code being used the same way at other UH campuses? No			
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 <small>(Please consult your Financial Aid Officer on Program Participation Agreement impact)</small>			
Is this program/major/certificate financial aid eligible? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <small>(Financial Aid Officer consultation required for all new program codes)</small>			
Should this program be available for applicants to select as their planned course of study on the online application? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <small>(If yes, students may select the code as their <u>only</u> program of study.)</small>			

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Replacing or eliminating an existing program code:

If replacing an existing program code, are current students "grandfathered" under the old code? Yes No

Should the old program code be available for use in Banner? Yes No

Will the old program code be available for:	Banner Module	Yes	No	Ending Term (Semester-Year)
	Online Application	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Recruitment	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Admissions	<input type="checkbox"/>	<input type="checkbox"/>	_____
	General Student	<input type="checkbox"/>	<input type="checkbox"/>	_____
	Academic History	<input type="checkbox"/>	<input type="checkbox"/>	_____

2. CERTIFICATES ONLY:

Does this certificate qualify as a Gainful Employment Program (Title IV-eligible certificate program)? Yes No
(Please consult your Financial Aid Officer or see: <http://www.ifap.ed.gov/GainfulEmploymentInfo/index.html>)

For new certificates approved by the Chancellor, the related BOR authorized academic program is:

3. NEW CAMPUS, COLLEGE, DIVISION, OR DEPARTMENT CODE		Banner forms: STVCAMP, STV_COLL, STVDIVS, STVDEPT
Campus code [3 char]:	Campus description [30 char/space limit]:	
College code [2 char]:	College description [30 char/space limit]:	
Division code [4 char/space limit]:	Division description [30 char/space limit]:	
Department code [4 char/space limit]: CM	Department description [30 char/space limit]: Construction Management	

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4. NEW COURSE SUBJECT CODE (Subject Alpha)		Banner form: STVSUBJ
College: Transportation & Trades	Department: Construction Management	
Subject code [4 char/space limit]: CM	Subject description [30 char/space limit]: Construction Management	

5. NEW MINOR (Minor codes are listed on the Major code table)		Banner form: STVMAJR
Minor Code [4 char/space limit]:	Minor Description [30 char/space limit]:	

Please briefly describe your request and explain why you are requesting the code(s):

We are requesting major, department and subject codes for the recently approved (BOR Meeting Mar. 15, 2012) AS Construction Management program, which is scheduled to be introduced in the Fall 2012 semester.

SUPPORTING DOCUMENTATION
<p>Please see the Code Request Guide for the required supporting documents to be submitted. Documents submitted with this form:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Board of Regents meeting minutes and supporting documents provided to the BOR <input type="checkbox"/> Memo from UH President <input type="checkbox"/> Memo from Chancellor <input checked="" type="checkbox"/> Curriculum (required for requests for new programs/majors/minors/certificates) <input type="checkbox"/> Gainful Employment Program notification to the US Department of Education <input checked="" type="checkbox"/> Other: <u>BOR Memo of approval and supporting documents provided to the BOR</u>

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CAMPUS VERIFICATION		
Requestor Signature <u>Carahy</u>	Date <u>04/02/2012</u>	
Registrar (If different from Requestor)		
Farah Doiguchi	<u>Carahy</u>	04/02/2012
Print name	Signature	Date
Email/memo in lieu of Registrar's signature may be attached		
Financial Aid Officer (Financial Aid Officer consultation required for all new program codes)		
<u>Jannine Oyama</u>	<u>Jannine Oyama</u>	04/03/2012
Print name	Signature	Date
Email/memo in lieu of Financial Aid Officer's signature may be attached		
For Community Colleges, verification of consultation with OVPCC Academic Affairs:		
_____	_____	_____
Print name	Signature	Date
Email/memo in lieu of signature may be attached		

Send completed form and supporting documentation to:

Institutional Research and Analysis Office (IRAO)
 1633 Bachman Place Email: iro-mail@lists.hawaii.edu
 Sinclair Annex 2, Room 4 Fax: 808-956-9870
 Honolulu, HI 96822 Phone: 808-956-7532

After all required forms and supporting documents have been submitted, please allow at least two weeks for processing by IRAO and Banner Central.

FOR INTERNAL USE ONLY	Date form/docs received:
Program code [12]:	Program Description [30]:
CIP code [6]:	CIP description [30]:

Construction Management

New Program Proposal

2012



UNIVERSITY *of* HAWAII®
HONOLULU
COMMUNITY COLLEGE

NEW PROGRAM PROPOSAL

ASSOCIATE OF SCIENCE IN CONSTRUCTION MANAGEMENT HONOLULU COMMUNITY COLLEGE

1. Objectives of the Program:

Honolulu Community College proposes to develop an Associate in Science degree in Construction Management. The College currently offers a number of degrees focused on the construction industry. Some of these include the Associates of Science degrees and/or Certificates of Achievement in Carpentry Technology, Sheet Metal and Plastics Technology, Refrigeration and Air Conditioning Technology, Electrical Installation and Maintenance Technology, Welding Technology, among others. Honolulu Community College is also mandated to provide the apprenticeship training in these areas in conjunction with the appropriate trade unions and industry organizations. Additionally, the College was key in forming the state wide Construction Academy program which was the first of its kind in embedding community college faculty into the high school classroom environment focused on teaching contextualized learning, while exposing student to career and technical educational programs.

The number of programs housed at Honolulu Community College makes it strategically key in the development and implementation of this program. The already developed pathways that engage high school students will serve as one of the many recruitment streams of enrolling student into the program. Other individuals targeted for this degree path will be those already in the construction industry workforce looking to retool their education and skills to then enter higher level positions. This may also include individual injured on the job in trades related occupations. The College has already experience existing employees within the construction industry who have expressed interested in an associates degrees in order to qualify for promotions within their current line of work. A partnership with the College of Engineering at UH Manoa will help to facilitate the transition to a baccalaureate degree. Honolulu Community College also plans to offer a Pre-Construction Management (Engineering) track for those seeking to obtain a baccalaureate degree.

The proposed program is designed for students who are planning to enter the construction management related occupations that require an associate's degree. The Associate of Science in Construction Management will provide the students with:

1. A comprehensive academic background based on construction management principles and concepts that incorporates both sustainable and traditional construction methods.
2. Hands on experience in the inquiry approach to problem-solving, problem-based learning, and place-based learning.
3. Exposure to technologies and skills required in construction management.
4. Information about careers in a variety of construction related areas.
5. Knowledge and skills that address sustainability in construction and green building management.

Program Mission: The Construction Management program's mission is to provide training for students who are interested in developing entry level skills or in-service professional development required for employment in the construction industry.

Program Description: The Construction Management program is designed to prepare students for immediate employment as quantity surveyors, estimators, coordinators, project engineers, and supervisors. The program intends to provide well rounded individuals with skills in AutoCAD, Building Information Modeling software, Primavera, and other industry standard software.

Program Student Learning Outcomes (SLO):

Upon the successful completion of the CM program, students will be able to:

- Demonstrate key skills necessary for effective management, planning, scheduling, and control of the overall construction project with attention to related sustainable considerations.
- Explain the materials and methods used in the construction of commercial and residential construction projects, covering procedures, equipment, sustainability, and techniques.
- Demonstrate proficiency in the interpretation of construction drawings and specifications, construction safety principles and practices, LEED essential elements, and related federal, state, and county codes.

2. Relationship of Objectives to Appropriate Functions of the College and University:

Honolulu Community College's mission statement supports the College's role in delivering the Construction Management program. The College mission states:

Serve the community as an affordable, flexible, learning-centered, open-door, comprehensive community college that meets the post-secondary educational needs of individuals, businesses, and the community. Serve the Pacific Rim as the primary technical training center in areas such as transportation, information technology, education, communications, construction and public and personal services.

The College recently revisited and revised its strategic plan to align properly with the Community Colleges and University of Hawaii Strategic Plans. The proposed degree directly supports the College's strategic goals listed below:

GOAL A: Promote Learning & Teaching for Student Success

The Community Colleges will focus on student success by being learning colleges, providing access to quality programs, which are affordable, adaptable, flexible, and responsive to the changing needs of students and their communities.

GOAL B: Functions as a Seamless State System

The UH System will function seamlessly when student learning becomes the core of the mission, and when students who demonstrate adequate preparation, regardless of their education level or where they are currently enrolled, are able to take courses from any program or campus that meets their educational interests. As a seamless system, we will function collaboratively, foster collegiality, and respect the diversity of each campus.

GOAL C: Promote Workforce and Economic Development

To promote workforce and economic development by responding quickly with education and training programs to meet changing workforce requirements, by developing strategic partnerships with selected businesses and training providers, and by offering degrees in response to demonstrated market demands.

GOAL D: Develop our Human Resources: Recruitment/ Retention/Renewal

To sustain and enhance a skilled, knowledgeable and productive workforce, committed to the delivery of high quality education and service.

GOAL E: Develop Sustainable Infrastructure for Student Learning

Promote effective learning through a continuing commitment to the maintenance and improvement of the campus physical environment and through the application of new technologies to better serve traditional and nontraditional students.

More information on the relation to the Honolulu Community College strategic plan and the Hawaii System strategic plan is available in Appendixes A and B of this document.

3. Program Curriculum

The proposed program is designed for students who are planning to enter the construction management related occupations that require an associate’s degree. The proposed curriculum will require a minimum of 62-63 Credits of 100 or above level courses and a cumulative 2.0 grade point average for all courses required for the degree. These include:

- 40 credits of required Construction Management courses, including a supporting course from the Architectural, Engineering & CAD Technologies program.
- 22-23 credits of General Education requirements.

Program prerequisites include:

- AEC 80 or AEC 81 or BLPR 22 or instructor approval based on high school drafting or other prior training/experience.
- ENG 22 / ENG 60 or ESL 23 or Placement in ENG 100.
- Placement in Math 103 or higher

The proposed program requirements and sequence include:

Suggested First Semester		Course Title	Certificate of Achievement	Associate of Science Degree Credits
GER1a	ENG 100	Composition	3	3
	CM 100	Intro to Construction Management	3	3
	CM 112	AutoCAD for Construction Management		4
	AEC 118	Construction Materials	3	3
GER2c	MATH 103 College Algebra or MATH 135, 140, 205, 206+206L, 231, or 232	College Algebra	3-4	3-4
			12-13	16-17
Suggested Second Semester				
	CM122	Construction Drawings Drawing for CM		3
	CM 123	Building Information Modeling (BIM) Software		3
	SP 251	Principles of Effective Speaking	3	3
GER1b	ENG 209	Business Writing	3	3
	CM 145	Occ. Safety & Health in Construction	3	3
			9	15

Suggested Third Semester	Course Title	Certificate of Achievement	Associate of Science Degree Credits
CE 211	Surveying		3
CM 210	BIM in Construction Management		3
CM 216	Construction Law and Contracts	3	3
CM 214	Building Systems for Construction Management	3	3
ACC 201	Elementary Accounting	3	3
	Sub-Total	9	15
Suggested Fourth Semester			
IS 106	Sustainable Construction Practices	3	1
100 level	General Education Course/ Humanities/ Fine Arts		3
CM 228	Estimating and Bidding for Construction Management	3	3
CM 220	Construction Documents	3	3
CM 226	Construction Planning and Scheduling	3	3
CM 224	Introduction to Structural Design		3
	Sub-Total	12	16
	Minimum Credits Required	42-43	62-63

Appendixes E provide examples of the graduation check sheet to be used by students. Appendix F provides a complete description of course offerings

4. Program Enrollment

Relation to Hawai'i State Department of Education (DOE) Career Pathways:

This degree directly supports Department of Education career pathways developed to guide career exploration and planning activities, to focus teaching and learning, and to link education with relevant real-world experimental activities. The career pathway supported by this degree is Industrial and Engineering Technology.

The Construction Academy is also a major initiative spearheaded by Honolulu Community College. That program allows for students to become engaged and experience the number of trade programs available for career choices and appropriate degree pathways. For the 2010-11 school year the Honolulu Community College Construction Academy program serviced eight Department of Education course at 17 O`ahu high schools. Out of the 1,207 students that were serviced, nearly three quarters (73.8%) of the students were juniors and seniors. Of the 485 seniors serviced by the Academy, 197 (40.6%) were admitted into the University of Hawai'i (UH) System campus after graduation from high school; 45.2% of these student were admitted to Honolulu Community College. One hundred eighty-eight students identified a field of study. Of these 188 students, 58 (29.4%) chose a major in a construction related field. This proposed associate degree will serve as a possible next step for high school students seeking a career in construction.

In addition, the college plans to pursue a four-year degree plan with the University of Hawaii at West Oahu (UHWO). Honolulu Community College already has several pre-existing pathway agreements allowing Honolulu Community College graduates to fulfill the first two years with lower division course work at the college and then complete an additional two years at UHWO. The construction management degree fits the profile of a transferable 2+2 degree and will be consistent with the already established agreements in Administration of Justice, Early Childhood Education, and Computer, Electronics, Networking Technologies.

Needs Assessment

Presently, there are no specific degree or certificate programs available at the undergraduate level with the UH system. The University of Hawai'i at Manoa, College of Engineering offers a Master of Science in Construction Management. Honolulu Community College faculty and administration have begun discussions with the UHM College of Engineering to work on alignment of the Construction Management degree with the undergraduate Engineering programs, with the hopes to develop other pathways for students matriculating through the University of Hawaii colleges. While this program is on provisional status, ongoing evaluation of student needs and industry demand will help determine if further articulation to College of Engineering is warranted.

Stimulus funding, rail, current interest rates are pointing to a favorable construction climate. When the construction industry regains its momentum, HCC will need to be prepared to supply not only construction tradespersons but well-educated construction leaders with experience to meet the new challenges of Sustainable Construction.

Currently, there are approximately 9 accredited community colleges that offer a similar program, with 8 more that are in the process of developing Construction Management programs, according to the American Council on Construction Education.

Occupations that will require an Associate's degree as a minimum qualification include project coordinators, junior estimators, quantity surveyors, surveyors, project engineers, quality control officers, safety officers, and supervisors.

SOC data estimates that through 2017, Oahu will have approximately 40 openings per year both new jobs and through separation. Nationally, the Department of Labor BLS data projects through 2018 projects employment in the field will grow by 17%. In Hawai'i, O*net data projects a 14% increase in the number of jobs and approximately 40 jobs available per year. Hirenet and O*net both rate Construction Management as "better than Average" for its projected growth rate.

EMSI data for the State of Hawai'i show 2764 existing jobs with a 10% increase in positions over the next five years to more the 3000 positions. Of these positions it is expected to have more that 600 or 22% of available position open for employment.

SOC code	Description	2011	2017	Change	% Change	Opening	% Opening
47-1011	First-line supervisors/managers of construction trades and extraction workers	2,764	3,040	276	10%	605	22%

Appendix “C” includes a listing of current job openings for graduates with an associates degree from companies here in Hawaii and in the Pacific basin. These jobs were placed in mid-September from government agencies, to private companies.

The faculty planners and administration have already established an advisory board and have begun regularly scheduled meetings. The members of the advisory board have expressed the need for the program. In addition, several students have already been referred to the program by parent who own construction companies, in hopes that the program (so far only via experimental basis) will prepare them to eventually acquire their family business. Other students have been referred to the program by their employers. Several letters of support are available in Appendix D of this document.

Advisory Board Members:

Dee Oswald, Project Executive, Kiewit Building Group

Wayne Kawano, President, CCPI

Herbert Chock, President, Herbert Chock & Associates, Inc.

Bert Ogasawara, General Superintendent, Pankow Special Projects

Owen Miyamoto, Retired Head of Airports, State of Hawaii

Eric Hashizume, Vice President Building Division, Hawaiian Dredging & Construction

Ranelle Ho, Senior Project Manger, SSFM International

Glenn Ushio, Vice President, TOMCO, Inc.

Miles Yamasaki, RME, JENCO, Inc.

Chris T. Takashige, PE, Area Engineer U.S. Army Corps of Engineers

Alan Shintani, President, Alan Shintani General Contractor, Inc.

Gregg T. Kodama, Vice President, Brett Hill Management Group, LLC.

5. Resources Required for Program Implementation

Faculty - The College has reallocated two existing FTE faculty qualified to teach the Construction Management courses. Drawing on its expertise from existing Construction Academy faculty, the college decided to reassign faculty to the development of the Construction Management program. Participation in the Solar Decathlon in partnership with University of Hawai'i Manoa's College of Engineering and School of Architecture demonstrates the colleges commitment to the CM program. Construction Management faculty and students will also be an important resource to support the emerging relationship with the Department of Hawaiian Homes (DHH), in the design, management, and construction of a residence on an identified DHH site. These types of long-range live projects demonstrate the ability and commitment to provide the resources necessary to support the Construction Management Program.

Library Resources: The program faculty has met with the librarian staff and has concluded that the College already has adequate library resources to support the proposed program.

Physical Resources – The faculty currently teaching the experimental Construction Management courses are housed in office space close to the AEC program. This allows for close collaboration between the faculty within the two disciplines. In addition, the Construction Academy will utilize previously existing student laboratory space in the AEC and Apprenticeship programs. Additional supplies, computer hardware and software, and surveying equipment will need to be purchased to insure that the program has the adequate equipment and the most up-to-date technologies available.

Cost-Revenue Template

In the Fall 2010 semester, HCC ran an experimental course, AEC 197 Introduction to Construction Management. Current students in other majors have expressed interested in the program as well. As the college continues to develop and run courses on an experimental basis, a base of approximately 20 students have already surfaced interested in attaining the degree. Given the letters of support and daily inquiries regarding the program, it is expected to have a base of 40 students entering per year, totaling enrollment over the next three years at 80 majors.

- a. **Annual costs to implement the program:** Refer to the cost- revenue template on page 10 of this document.

6. Measures of Program Efficiency

Program efficiency will be measured by the community college's program health indicators, including; (a) number of majors; (b) course fill rate (how many student registered in courses compared to number of seats available); (c) the number of courses taught per year; (d) the number of graduates.

7. Measures of Program Effectiveness

Program effectiveness will be measured by: (a) placement of graduate into related industry positions; (b) success rate of transfer students; (c) performance of graduates in related industry positions. Program outcomes will be measured by; (a) student evaluations; (b) course completion rates.

A variety of student assessments will be used. All students in the program will be required to maintain portfolios of their course work including project and internship reports, field notes, papers, presentations, and other instructors' and supervisors' evaluations. The AS-CM faculty will develop rubrics for assessing student progress as shown in the portfolio.

Cost-Revenue Template

A	B	C	D	E	F	G	H	I	J	K
1	Academic Cost and Revenue Template - New Program (adjust template for appropriate number of years) (Updated 09/06/11)									
2										
3	ENTER VALUES IN YELLOW CELLS ONLY									
4	CAMPUS/Program		Honolulu CC/ Const Mgt		Provisional Years (2 yrs for Certificate, 3 yrs for Associate Degree, 6 yrs for Bachelor's Degree, 3 yrs for Masters Degree, 5 yrs for Doc					
5			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
6	ENTER ACADEMIC YEAR (i.e., 2011-2012)		2012-13	2013-14	2014-15					
7	Students & SSH									
8	A. Headcount enrollment (Fall)		40	80	80					
9	B. Annual SSH		1,240	2,480	2,480					
10										
11										
12	Direct and Incremental Program Costs Without Fringe									
13	C. Instructional Cost without Fringe		\$ 136,500	\$ 146,055	\$ 151,897					
14	C1. Number (FTE) of FT Faculty/Lecturers		2.00	2.00	2.00					
15	C2. Number (FTE) of PT Lecturers		-	-	-					
16	D. Other Personnel Costs		\$ -	\$ -	\$ -					
17	E. Unique Program Costs		\$ 15,000	\$ 10,000	\$ 10,000					
18	F. Total Direct and Incremental Costs		\$ 151,500	\$ 156,055	\$ 161,897					
19										
20	Revenue									
21	G. Tuition		\$ 125,240	\$ 262,880	\$ 282,720					
22	Tuition rate per credit		\$ 101	\$ 108	\$ 114					
23	H. Other		\$ -	\$ -	\$ -					
24	I. Total Revenue		\$ 125,240	\$ 262,880	\$ 282,720					
25										
26	J. Net Cost (Revenue)		26,260	-106,825	-120,823					
27										
28										
29										
30	Program Cost per SSH With Fringe									
31	K. Instructional Cost with Fringe/SSH		\$ 149	\$ 80	\$ 83					
32	K1. Total Salary FT Faculty/Lecturers		\$ 136,500	\$ 146,055	\$ 151,897					
33	K2. Cost Including Fringe of K1		\$ 184,275	\$ 197,174	\$ 205,061					
34	K3. Total Salary PT Lecturers		\$ -	\$ -	\$ -					
35	K4. Cost Including fringe of K3		\$ -	\$ -	\$ -					
36	L. Support Cost/SSH		\$ 279	\$ 279	\$ 279					
37	Non-Instructional Exp/SSH		\$ 233	\$ 233	\$ 233					
38	System-wide Support/SSH		\$ 46	\$ 46	\$ 46					
39	Organized Research/SSH		\$ -	\$ -	\$ -					
40	M. Total Program Cost/SSH		\$ 428	\$ 359	\$ 362					
41	N. Total Campus Expenditure/SSH		\$ 505	\$ 505	\$ 505					
42										
43	Instruction Cost with Fringe per SSH									
44	K. Instructional Cost/SSH		\$ 149	\$ 80	\$ 83					
45	O. Comparable Cost/SSH		\$ 200	\$ 200	\$ 200					
46	Program used for comparison.		HonCC / Career & tech							
47										
48	Reviewed by campus VC for Administrative Affairs: (signature and date)									
49	Instructions									
50	Please include an explanation of this template in your narrative.									
51	A. Headcount Enrollment: Headcount enrollment of majors each Fall semester. Located at url: http://www.hawaii.edu/iro/maps.php? Category = Enrollment. Campus data may be used when majors are a subset of enrollment reported in IRO reports.									
52	B. Annual SSH: Course Registration Report located at http://www.hawaii.edu/iro/maps.php? Title = Course Registration Report. Add the SSH for the Fall and Spring reports to obtain the annual SSH. This is all SSH taught by the program, including to non-majors. Adjust if majors are shh set of SSH reported.									
53	C. Instructional Cost without Fringe (automated calculation): Direct salary cost for all faculty and lecturers teaching in the program. *Formula for column D: =IF(OR(D32<>"",D32+D34,""))									
54	C1. Number of full time faculty and lecturers who are >= 5 FTE									
55	C2. Number of part time lecturers who are <= 5 FTE									
56	D. Other Personnel Cost: Salary cost (part or full time) for personnel supporting the program (APT, clerical lab support, advisor, etc.) This includes personnel providing necessary support for the program who may not be directly employed by the program and may include partial FTEs. Add negotiated collective bargaining increases and 4% per year for inflation thereafter.									
57	E. Unique Program Cost: Costs specific to the program for equipment, supplies, insurance, etc. For provisional years, this would be actual cost. For established years, this would be projected costs using amortization for equipment and add 4% per year for inflation thereafter.									
58	F. Total Direct and Incremental Cost: C + D + E *Formula for column D: =IF(OR(D13<>"",D16<>0,D17<>0),SUM(D13,D16,D17),"")									
59	G. Tuition: Annual SSH X resident tuition rate/credit *Formula for column D: =IF(D10>0,D10*D22,"")									
60	H. Other: Other sources of revenue including grants, program fees, etc. This should not include in-kind contributions unless the services or goods contributed are recorded in the financial records of the campus and included in Direct and Incremental Costs in this template.									
61	I. Total Revenue: G + H *Formula for column D: =IF(OR(D21<>"",D23<>0),SUM(D21,D23),"")									
62	J. Net Cost: F - I This is the net incremental cost of the program to the campus. A negative number here represents net revenue (i.e., revenue in excess of cost.) If there is a net cost, please explain how this cost will be funded. *Formula for column D: =IF(AND(D18<>"",D24<>"",D18-D24,""))									
63	K. Instructional Costs with Fringe/SSH: (K2 + K4) / B *Formula for column D: =IF(D10<>"",SUM(D33,D35)/D10,"")									
64	K1. Salaries without Fringe of Full Time Faculty and Lecturers who are >= 5 FTE based on FTE directly related to the program. Add negotiated collective bargaining increases and 4% per year for inflation thereafter.									
65	K2. K1 X 1.35 *Formula for column D: =IF(D32<>"",D32*1.35)									
66	K3. Salaries without Fringe for Lecturers who are <= 5 FTE based on FTE directly related to the program. Add negotiated collective bargaining increases and 4% per year for inflation thereafter.									
67	K4. K3 X 1.05 *Formula for column D: =IF(D34<>"",D34*1.05)									
68	L. Support Cost/SSH: The campus' non instructional expenditure/ssh + systemwide support - organized research (UHM only) as provided by UH Expenditure Report (http://www.hawaii.edu/budget/expand.html) *Formula for column D: =IF(OR(D37>0,D38>0,D39>0),D37+D38-D39,"")									
69	For example, from the 2009-10 UH Expenditure Report, the support expenditure/ssh per campus is:									
70										
71										
72	UHM \$450.00 + \$56 - \$131 for organized research = \$375									
73	UHH \$369.00 + \$42 = \$411									
74	UHWO \$210.00 + \$31 = \$241									
75	Haw CC \$164.00 + \$37 = \$201									
76	Hon CC \$233.00 + \$46 = \$279									
77	Kap CC \$119.00 + \$29 = \$148									
78	Kau CC \$359.00 + \$64 = \$423									
79	Lee CC \$123.00 + \$27 = \$150									
80	Mau CC \$163.00 + \$36 = \$199									
81	Win CC \$277.00 + \$41 = \$318									
82										
83	M. Total Program Cost/SSH: K + L *Formula for column D: =IF(OR(D31<>"",D36<>"",D31+D36,""))									
84	N. Total Campus Expenditure/SSH: Taken from UH Expenditures Report For example, for 2008-2010: UHM = \$923-131 (organized research) = \$792, UHH = \$682, UHWO = \$501, HawCC = \$408, HonCC = \$505, KapCC = \$316, KauCC = \$703, LeeCC = \$300, Maul CC = \$396, WinCC = \$457									
85	O. Comparable Program/Division Instructional Cost/SSH: Taken from UH Expenditures Report (http://www.hawaii.edu/budget/expand.html) or campus data, as available. Please note in the space provided, the program used for the comparison.									
86										
87	Rev. 09/06/11									

APPENDIX “A”

Goals, Objectives, and Action Strategies of the University of Hawaii’s Honolulu Community College Strategic Plan 2008-2015

The following goals, objectives, and action strategies of the College’s 2008-2015 strategic plan that are directly supported by the proposed Associates of Science in Construction Management.

GOAL A: Promote Learning & Teaching for Student Success

The Community Colleges will focus on student success by being learning colleges, providing access to quality programs, which are affordable, adaptable, flexible, and responsive to the changing needs of students and their communities.

Hawaii’s Educational Capital

Increase the educational capital of the state by increasing the participation and completion of students, particularly low-income students and those from underserved regions

Performance Measures

- a) Increase credit enrollment by 1% per year to 4,500 students by 2015.
- b) Promote low-income student success and graduation by increasing the Pell Grant participation by 14% per year to 1,455 students (39% of those eligible to participate), and the total annual amount of Pell Grant aid disbursed to \$2,851,130 by 2015.
- f) Increase the number of students who successfully progress and graduate, or transfer to baccalaureate institutions by 3-6% per year to 1,025 by 2015, while maintaining the percentage of transfers who achieve a first year GPA of 2.0 or higher at the transfer institution.

GOAL B: Functions as a Seamless State System

The UH System will function seamlessly when student learning becomes the core of the mission, and when students who demonstrate adequate preparation, regardless of their education level or where they are currently enrolled, are able to take courses from any program or campus that meets their educational interests. As a seamless system, we will function collaboratively, foster collegiality, and respect the diversity of each campus.

APPENDIX “A”

STRATEGIC OUTCOMES:

A Globally Competitive Workforce

Address critical workforce shortages and prepare students for effective engagement and leadership in a global environment.

Performance Measures

- a) Increase the number of degrees awarded, and/or transfers to UH baccalaureate programs that lead to occupations where there is a demonstrated state of Hawai'i shortage of qualified workers, or where the average annual wage is at or above the U.S. average (2006=\$38,651) by 3% per year to 665 by 2015.
- b) Work closely with employers to create a better understanding of their requirements for a qualified workforce as well as develop increased opportunities for internships and eventual employment by our program graduates.
- c) Contribute to meeting the State's incumbent worker education goal by increasing enrollment of 25-49 years old in credit programs by 2% per year to 1,670 by 2015.
- d) Increase the annual degrees/certificates awarded in Science Technology, Engineering, and Math (STEM) fields by 6% per year to 135 by 2015.

A Seamless System

Contribute to the continued development of a seamless education system that meets the state's evolving demand for a qualified workforce by actively working with high schools and colleges to increase the number of students who successfully move from high school to college and into high skilled, high wage jobs within the state.

Performance Measures

- a) Create specific articulated pathways between selected high schools and the College designed to smooth the transition between the two institutions as well as improve the educational preparation of recent high school graduates who enroll in the college.
- b) Create specific articulated pathways between the college and baccalaureate granting institutions by increasing the number of specific program-to-program articulation agreements.
- c) Work closely with employers to create a better understanding of their requirements for a qualified workforce as well as develop increased opportunities for internships and eventual employment by our program graduates.

APPENDIX “A”

GOAL C: Promote Workforce and Economic Development

To promote workforce and economic development by responding quickly with education and training programs to meet changing workforce requirements, by developing strategic partnerships with selected businesses and training providers, and by offering degrees in response to demonstrated market demands.

STRATEGIC OUTCOMES:

Economic Contribution to the State

Contribute to the state’s economy and provide a solid return on its investment in higher education through research and training.

Promote Workforce Development

Respond to the evolving workforce needs of the various communities served by Honolulu Community College.

Performance Measures

- a) Refining and improving the alignment between our program offerings, curricula, and enrollment, and the external demand.
- b) Increase the number and diversity of programs offered to or in underserved regions by increasing the number and types of programs that can be completed through distance learning technologies.

GOAL E: Develop Sustainable Infrastructure for Student Learning

Promote effective learning through a continuing commitment to the maintenance and improvement of the campus physical environment and through the application of new technologies to better serve traditional and nontraditional students.

STRATEGIC OUTCOME:

Resources and Stewardship

Acquire, allocate, and manage public and private revenue streams and exercise exemplary stewardship over all of the College’s resources, for a sustainable future.

Performance Measures

- a) Build and/or acquire appropriate facilities to deliver educational programs and services, and identify repairs and maintenance requirements to properly maintain existing facilities.
- b) Increase operational efficiency by: increasing the average class size to the average of the UHCC system (CTE = 18; GPP = 23) by 2015, and reducing redundant infrastructure and services.
- f) Develop and sustain an institutional environment that promotes transparency, and a culture of evidence that links institutional assessment, planning, resource acquisition, and resource allocation as measured by faculty and staff responses on the Community College Inventory.

APPENDIX “B”

The Construction Management program directly supports the mission of the University of Hawai'i system as:

The common purpose of the University of Hawai'i system of institutions is to serve the public by creating, preserving, and transmitting knowledge in a multi-cultural environment. The University is positioned to take advantage of Hawai'i's unique location, physical and biological environment, and rich cultural setting. At all levels in the academy, students and teachers engage in the mastery and discovery of knowledge to advance the values and goals of a democratic society and ensure the survival of present and future generations with improvement in the quality of life.

The Construction Management program supports the following University of Hawai'i Community College Strategic Outcomes and Performance Measures 2008-2015:

2.4 Increase by 5% per year the number of students who successfully progress and graduate, or transfer to baccalaureate institutions, while maintaining the percent of transfers who achieve a first year GPA of 2.0 or higher at the transfer institution.

3.1 Increase by 3% per year the number of graduates in programs, or students who transfer to baccalaureate programs, that lead to occupations where the average wage is at or above the U.S. average (\$38,651).

3.2 Contribute to the development of a highly skilled, high wage workforce through the establishment of new education and training programs that lead to employment in emerging fields identified as innovative and knowledge-intensive opportunities.

The Construction Management program also clearly supports and enhances the fulfillment of Honolulu Community College's mission. The college mission states, Honolulu Community College is committed to:

Serve the community as an affordable, flexible, learning-centered, open door, comprehensive community college that meets the post-secondary educational needs of individuals, businesses, and the community.

Serve the Pacific Rim as the primary technical training center in areas such as transportation, information technology, education, communications, construction and public and personal services.

The mission statement also includes a series of specific goals to enable the College to fulfill this mission. Adding the Construction Management program will manifestly, support the following Honolulu Community College goals:

Provide two-year transfer educational programs that offer students the general educational component of the Baccalaureate Degree.

APPENDIX “B”

Insure general education competency in communications, problem-solving, ethical deliberation, cultural diversity, and global awareness.

To provide co-curricular programs and activities to promote student learning and development and to prepare students for leadership roles and responsibilities in a global community.

Contribute to the support of the community’s economic and social growth.

The Construction Management program will establish itself as a premier training center for construction management in Hawai’i. The program will support the economic recovery and development in the state of Hawai’i and its construction industry. The establishment of this program will develop a high skilled, high-wage workforce in the construction industry. In addition, the curriculum focus will contribute to the development and training of mid-management positions within an industry that ethnic and gender diversity is appreciated, respected, and promoted. Enrollment projections anticipate a beginning enrollment of 20 students, with an increase to 40 students by Fall 2012.

APPENDIX “C”

- **Construction Project Manager / Estimator**

Local Construction company seeking to hire a full time project manager/estimator. Construction knowledge critical for residential and light commercial. Sub-Contractor and vendor knowledge good to have.

Must be able to read Blueprints and do accurate quantity takeoffs, Architectural background preferred.

Supervise workers and set job schedule.

CAD, Computer, and good communication skills required.

Send Resume' with salary requirements and references

- **Project Engineer**

Immediate opening for Inter Project Engineer. Recent college graduate perfect position to gain work experience.

We are seeking individuals who are team players and are eager to develop new skills and abilities. The duties will include field support for superintendents and administrative documentation.

Candidates should have, as a minimum:

- * Engineering degree (desired but not required)

- * Computer skills (Excel, Word, and Adobe Acrobat)

- * Driver's License (clean record)

Fax your resume to 682-9280 or Email to apbhr@apbconstructiongroup.com

- **Full-Time, Project Engineer/Project Manager**

Who will be responsible for all phases of Electrical project management.

Responsibility includes but not limited to project organization, project documentation, progress measurement for payment, change orders, etc.

Must have scheduling experience, Federal or State job project experience preferred.

Must be able to multi-task and have excellent computer skills.

Full-Time, Project Engineer Assistant, Assist Sr. Project Engineer w/ various tasks, including but not limited to assist development of bid packages, manage CPM schedules, review submittals, process subcontractor billings. and other tasks as needed.

Excellent computer, communication, administration skills & multi-tasking essential.

Please e-mail your resume.

APPENDIX “C”

- **Project Engineer**

Key Responsibilities:

Tasks include performing, scheduling and witnessing inspections, testing, monitoring construction activities and documenting results.

Issue reports for subcontractors regarding quality deficiencies and remediation requirements.

Ensure adequate corrective measures are implemented in cases of noncompliance.

Review for compliance with requirements and maintain contract documents, drawings, specifications, as-builts, RFIs and submittals.

Inspect materials, equipment and workmanship.

Develop punchlist and final inspection and acceptance.

Qualifications Required:

2 or 4 year degree in building science, construction management or engineering.

5 years field experience on Government projects desirable but not required.

Computer knowledge and skills.

Good written and verbal communication skills.

Additional Information:

Travel between the Hawaiian Islands depending on job location.

Send resume to olivia@primatechconstruction.com

- **HECO Planner / Scheduler**

Management services company in Honolulu currently has two (2) Planner / Scheduler positions available. These individuals will be working on a project with Hawaiian Electric Company (HECO). This is a very exciting opportunity, that could eventually lead to full-time employment with HECO.

The Planner / Scheduler will primarily be responsible for facilitating the planning process of overhead pole installation and replacement. Will be working with and writing work packages to have overhead poles replaced and sending HECO contractors out to job sites. Will also be conducting research, using project planning documents, and obtaining input from team members, suppliers, and subcontractors in order to support the development of project schedules.

These openings are entry- to mid-level positions. Previous engineering technician and/or construction scheduling experience would be helpful.

APPENDIX “C”

The company utilizes proprietary software. On-the-job training will be provided.

Location:

Ward
Oahu: Various

Salary:

\$20.00 to \$25.00 Hourly

Required Education and Qualifications:

- Scheduling and planning experience with Primavera or project experience would be helpful
- Must be computer literate and proficient
- Good communication skills and the ability to work well with others

- **Cost Estimating, Engineer**

Economy Plumbing & Sheetmetal is a well established local Mechanical Construction Firm completing air conditioning and plumbing projects in Hawaii since 1958.

We are seeking a motivated Engineer for a cost estimating position. We are looking for a candidate with some construction experience (no more than 5 years experience). Individuals should be career minded, goal oriented, and ready to grow and develop with an established firm.

Job Responsibilities

- 1) Ability to read blueprints and develop accurate material take offs
- 2) Review contract drawings and specifications
- 3) Ability to write RFI clarifications
- 4) Communication with other contractors and material suppliers

Minimum education and experience

- 1) Previous Experience utilizing Mechanical Estimating Software Programs
- 2) Engineering or Drafting college courses. Mechanical Engineering Degree from an accredited school will be given preference.
- 3) Minimum of two (2) years working experience in Construction Field
- 4) Computer skills – Microsoft Office (Word, Excel), Windows, Adobe
- 5) Excellent interpersonal and communication skills

Preferred Qualifications:

- 1) Mechanical design experience

APPENDIX "C"

2) Basic drafting skills

3) Computer estimating experience

Competitive salary and benefit package. Salary and benefits are based on experience. If interested, email cover letter and resume with detailed project history and references to eps-hr@hawaii.rr.com. Questions related to these positions can be addressed to this email as well.

In state candidates preferred. No relocation assistance is available for these positions.

APPENDIX “D”

LETTERS OF SUPPORT

HCA HERBERT CHOCK & ASSOCIATES, INC.

Fort Street Tower, Ste. 708 - 745 Fort St. - Honolulu, Hawaii 96813 - (808)526-9399 - Fax (808)533-0771

August 25, 2011

Mike Rota, Chancellor
Honolulu Community College
874 Dillingham Blvd.
Honolulu, HI 96817

Re: Proposed Associates of Science in Construction Management Program at HCC

Dear Mr. Rota,

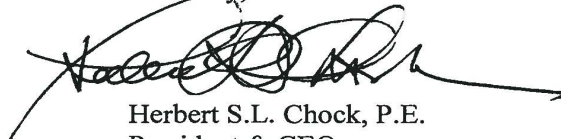
I am writing this letter in support of the proposed Construction Management Program for Honolulu Community College. As an active member of the Construction Industry in Hawaii (Construction & Engineering Consulting), my firm is constantly exposed to deficits in the area of construction and construction management. One of the reasons for this is lack of proper and continuous education and experience.

The resource of properly skilled personnel is not being filled because there are not enough opportunities for promising and potential student and/or journeymen to be educated in a formal environment. I believe that this is the "gap" that this proposed program will attempt to fill. That the opportunities such as this do not exist on a regular and economically reasonable basis emphasizes the need for this program.

It is encouraging to know that there is a future vision of the program evolving into a certified four year Construction Management Bachelor of Science degree is a possibility pending the success of the 2 year Associates degree. With the prospects of the construction industry in Hawaii continuing (long term) and with the emphasis on costs, time and technology becoming more critical, the need for this kind of preparation is absolutely essential.

Please feel free to call me if you have any questions regarding my comments on your program at (808)469-4671 or email: herb@hcahawaii.com.

Sincerely,



Herbert S.L. Chock, P.E.
President & CEO

HSLC/ez

Cc: Norman Takeya

C:\Documents and Settings\herb\Desktop\2010 CM ADVISORY GROUP\HCA LETTERHEAD.DOC

 **TOMCO CORP.**
General Contractors

500 Alakawa Street, Suite 100A Honolulu, Hawaii 96817
Ph (808) 845-0755 Fax (808) 845-1021

August 26, 2011

Mike Rota, Chancellor
Honolulu Community College
874 Dillingham Blvd.
Honolulu, Hawaii 96817

Dear Mike,

As a member of our local construction industry, please accept this letter of support for the proposed Associates of Science in Construction Management Program to be offered at Honolulu Community College.

Honolulu Community College has played a vital role in the training and development of our construction trade workers, and this proposed Construction Management program is long overdue and will assist and advance the industry as a whole.

Presently this position requires a minimum of five to ten years of on the job training and experience, not to mention the cost expended. I highly encourage and support the development of a Construction Management program as a four-year bachelor's degree.

Thank you for your time and consideration.

Aloha,


Glenn Ushio,
President



DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, HONOLULU DISTRICT
FORT SHAFTER, HAWAII 96858-5440

REPLY TO
ATTENTION OF:

August 26, 2011

Schofield Barracks Area Office
Construction Branch
Engineering & Construction Division

Board of Regents' Office
University of Hawaii
2500 Campus Road
Honolulu, HI 96822

Dear Sirs:

I am writing in support of the proposed Construction Management degree program at Honolulu Community College (HCC). As a US Army Corps of Engineers professional involved with construction management for the past 30+ years, the proposed degree program would greatly benefit the communities and the US military in Hawaii, by improving and enhancing all personnel involved in construction management activities.

Under the current construction hierarchy, construction project engineers utilize construction inspectors to accomplish a myriad of duties required to build private, commercial and government infrastructures and facilities. The work to fulfill these duties include quality control and assurance, safety, environmental, scheduling and contract administration, just to name a few, require knowledge and skills that can no longer be learned on the job and instead must be gained through formal classroom instruction. While the project engineer at a construction site uses their skills to resolve complex problems and provide organizational expertise, it is the non-engineer that takes up the duty mentioned previously, on a day to day basis. Historically these employees were construction specialty persons who have worked in either trade specific jobs or been trained in a particular occupation such as construction safety. Today, as construction projects have become diverse and complex, requiring so many skills, having a formal educational basis to draw upon would greatly benefit and enhance the construction industry.

The Department of Army, led by the US Army Corps of Engineers, is currently reviewing a proposal to establish a professional graded work series for 4-year Construction Management graduates, equivalent to engineers graduating with an accredited BS degree. This is being done to support mainland colleges awarding Engineering Tech and Construction Management degrees, but also because there is a recognized shortage of professional, non-engineer personnel available for construction management. It is expected that the proposal will be approved shortly; thereby allowing these graduates equal opportunity to compete for jobs with engineers. By allowing HCC to establish a 2-year program, and hopefully expanding to a 4-year degree, you will provide a great opportunity for local Hawaii graduates to compete for these jobs.

I urge you to fully support this initiative for the above reasons and to support the professional growth and development of the people of the State of Hawaii.

The views presented in this letter are those of the author and do not necessarily represent the views of DoD, the US Army, or the US Army Corps of Engineers.

Respectfully,

A handwritten signature in blue ink that reads "Chris T. Takashige". The signature is written in a cursive style with a large, stylized initial "C".

Chris T. Takashige, PE, CCM
Area Engineer, Schofield Barracks Area Office



August 31, 2011

Mr. Mike Rota, Chancellor
Honolulu Community College
874 Dillingham Blvd.
Honolulu, HI 96817

Subject: Construction Management Program at HCC

Dear Mr. Rota,

On behalf of the Cement and Concrete Products Industry of Hawaii (CCPI), please accept this letter of support for the proposed Associates of Science in Construction Management program at the Honolulu Community College.

As a member of the Industry Advisory Council at the University of Hawaii – College of Civil and Environmental Engineering, we have seen an attenuation of courses related to construction engineering and management program at the Manoa campus. This has created a critical gap in the training and educational development of Hawaii's future construction workforce; i.e. trade workers, inspectors, project engineers, and construction managers.

Furthermore, we fully endorse the development of this program into a four-year bachelor's degree program in Construction Management. Our local construction companies and engineering firms need the services of locally, well-trained and educated in construction management, in lieu of hiring from out of state.

We appreciate your attention on this matter. Please feel free to contact me at 848-7100 or email at wkawano@ccpihawaii.org if you have any questions. Mahalo!

Sincerely,

A handwritten signature in blue ink that reads 'Wayne Kawano'.

Wayne Kawano
President, CCPI

CCPI is a non-profit trade organization, representing over 30 companies statewide. For over 47 years, CCPI has represented the local suppliers of cement, concrete, and masonry products. Our purpose is not only to promote but to also protect and advance the welfare and interests of the concrete products industry as may be deemed more satisfactorily performed by group action rather than individual action.

APPENDIX “E”

Construction Management (CM) AY 20XX Graduation Checklist for Honolulu Community College (HCC)

Associate in Science (AS) Degree 62 credits

This is not an official document. Use it to keep track of your academic progress. You are responsible for meeting your program and graduation requirements. Check catalog for course descriptions and course prerequisites. See your academic counselor if you need help.

MAJOR PREREQUISITES FOR CM COURSES	CA	AS	COURSE	CREDIT	GRADE	SEMESTER YEAR
<ul style="list-style-type: none"> • AEC 80 or 81 or Instructor Approval • ENG 22/ENG 60 or ESL 23, or Placement in ENG 100 • Placement in MATH 103 or higher 						
Required Courses for Major. Must be taken in order.						
First Semester: Fall Only. All Courses Required						
CM 100 Introduction to Construction Management				3		
CM 112 AutoCAD for Construction Management				4		
AEC 118 Construction Materials				3		
ENG 100 Composition				3		
MATH 103 College Algebra or MATH 135, 140, 205, 206+206L, 231, or 232				3-4		
				16-17		
Second Semester: Spring Only. All Courses Required						
CM 122 Construction Drawings for Construction Management				3		
CM 123 Building Information Modeling (BIM)				3		
ENG 209 Business Writing				2		
CM145 Occ. Safety & Health in Construction				3		
SP 251 Principles of Effective Speaking				3		
				15		
Third Semester: Fall Only. All Courses Required						
CE 211 Surveying				3		
CM 210 BIM for Construction Management				3		
CM 216 Construction Law and Contracts				3		
CM 214 Building Systems for Construction Management				3		
ACC 201 Elementary Accounting				3		
				15		
Fourth Semester: Spring Only. All Courses Required						
IS 106 Sustainable Construction Practices				1		
100 Level Gen ED Hum/Fine Art				3		
CM 228 Estimating and Bidding for Construction Management				3		
CM 220 Construction Documentation				3		
CM 224 Introduction to Structural Design				3		
CM 226 Construction Planning & Scheduling				3		
Total				16		
Program Total Credits				62		

Graduation Requirements:

- 62 credits for Associate of Applied Science (AAS)
- 2.0 cumulative grade point average
- **Residency Requirement:** The final twelve (12) credits in the major must be earned from HCC. This requirement may be waived. See an academic counselor for more information.
- Submit graduation application by March 15 for Spring semester and October 15 for Fall semester. There is no graduation in the summer.
- When there is a break in enrollment for more than one year, must use the graduation requirements in effect at the time of applying for graduation.

APPENDIX “F”

Course Descriptions

BLPR 22, Blueprint Reading (3)

A basic course designed primarily for students in the construction trades. Topics include principles of graphic representation, basic building construction, interpretation of working drawings, and building specifications.

(3 hrs. lect. per week)

AEC 80, Basic Manual Drafting (2)

A first course in technical drawing designed primarily for students planning to enroll in regular-program Architectural, Engineering and CAD Technologies courses upon completion of this course, but open to others as well. Topics to include use of manual drafting tools, drawing to scale, orthographic projection, sections, dimensions, pattern drawing, and pictorial drawing. Similar to AEC 81, but manual drafting tools are used, and the course is an internet course.

1 hr. Lecture, 3 hrs. Lab / Week

AEC 81, Basic CAD Drafting (2)

Pre-program course required for all CM students who have not had high school or similar drafting training. Exploratory mechanical drawing using AutoCAD®. Emphasis on orthographic projection, dimensioning, sections, etc. rather than on the software.

1 hr. Lecture, 2 hrs. Lab / week

CM 100, Introduction to Construction Management (3)

(Prerequisite: AEC 80 or AEC 81 or BLPR 22 or Instructor Approval based on High School Drafting or other Prior Training; ENG 22 or ENG 60 or ESL 23 or Placement in ENG 100; Placement in MATH 103 or higher.)

(Corequisite: CM 112)

Introduction to the construction process, including a general overview of organization, relationships, practices, terminology, project types, procurement methods, industry standards, contract documents, and career opportunities.

3 hrs. Lecture / Week

CM 112, AutoCAD® for Construction Management (4)

(Prerequisite: BLPR 22 or AEC 80 or AEC 81, or instructor Approval)

(Corequisite: CM 100)

This course is an introduction to basic computer-aided drafting skills needed for Construction Managers. Emphasis is placed on drawing setup; creating and modifying geometry; placing, rotating, and scaling objects; adding text and dimensions; using layers; understanding various coordinate systems; as well as discussing input and output devices. There will be a concentration in the use of AutoCAD® software. A 4-credit course.

2 hrs. Lecture, 6 hrs. Lab / week

APPENDIX “F”

AEC 118, Construction Materials (3)

(Prerequisite: Placement in ENG 100 & MATH 24/50/53)

Survey of building materials, products, and systems. Concrete, masonry, wood, metals, conveying systems, plumbing systems, etc. Topics based on the CSI (Construction Specification Institute) format. A rigorous internet course.

CM 122, Construction Drawing for Construction Management (3)

(Prerequisites: CM 112, AEC 118)

(Corequisite: CM 123)

This course introduces the knowledge, skills, and abilities necessary to prepare a complete and comprehensive set of 2D Construction Drawings. Further exploration of materials and methods of construction will be included along with an introduction to building codes and basic design guidelines. There will be a concentration in the use of AutoCAD® software.

2 hrs. Lecture, 3 hrs. Lab / Week

CM 123, Building Information Modeling Basics for Construction Management (3)

(Prerequisite AEC 118)

(Corequisite: CM 122)

This course provides students with a well-rounded knowledge of Autodesk Revit® software. All three platforms of Revit® will be introduced, Revit Architecture®, Revit Structure® and Revit MEP® (Mechanical, Electrical and Plumbing).

2 hrs. Lecture; 3 hrs. Lab / Week

CM 145 Occupational Safety and Health in Construction (3)

(Cross-listed with OESM 145)

(Prerequisite: “C” or higher in ENG 22/60 or ESL 23, OR Placement in ENG 100; “C” or higher in MATH 25, OR Placement in MATH 100/103/115; CM 100)

(Recommended Prep: OESM 101)

Comprehensive overview of techniques and procedures to insure effective control of hazards and accidents in construction and allied industries; emphasis on applicable OSHA and HIOSH standards and related codes.

4.5 hrs. Lecture / Week

APPENDIX “F”

CM 210, Building Information Modeling in Construction Management (3)

(Prerequisite: CM 123)

This course provides students with a well-rounded knowledge of Autodesk Integrated Software. All three platforms of Revit® will be utilized, Revit Architecture®, Revit Structure® and Revit MEP® (Mechanical, Electrical and Plumbing). Additionally, an introduction to clash detection software like Navisworks, collaboration software like Constructware, and how they are both being used in the day-to-day operations of Construction Management will be demonstrated and practiced.

2 hrs. Lecture; 3 hrs. Lab / Week

CE 211, Surveying (3)

(Instructor Approval)

Introduction to basic surveying operations and computations. Development of the surveying skills necessary to measure distances, angles, and elevations to required accuracies. Calculation of tape corrections, bearing, coordinates, traverses, and areas. Emphasis is placed on instrument use and note-keeping techniques.

2 hrs. Lecture, 4 hrs. Lab / Week

CM 214, Building Systems for Construction Management (3)

(Prerequisite: AEC 118)

(Corequisite: CM 216)

Principles of code, design, methods, and materials are applied to plumbing, heating, ventilation, air conditioning, and electrical systems.

2 hrs. Lecture, 4 hrs. Lab / Week

CM 216, Construction Law & Contracts (3)

(Prerequisite: CM 145)

(Corequisite: CM 214)

This course focuses on understanding the relationship between contract documents and the construction process. Students will explore contractual relationships, legal roles, and responsibilities, and contract types. General condition clauses that affect levels of decision making authority, project close-out and the superintendents role as an agent of the contractor will be studied. Students will study legal issues that often result in construction disputes including differing site conditions, time and schedule impacts, change orders, and changed conditions. Students will also study contract dispute resolution including negotiations, alternative dispute resolutions, and litigation of dispute.

3 hrs. Lecture / Week

APPENDIX “F”

CM 224, Introduction to Structural Design (3)

(Prerequisite: CM 214)

Introduction of basic knowledge of structural engineering that includes principles of analysis of structures and their application, behavior of materials under loading, selection of construction materials and design fundamentals for RCC and steel structures. The emphasis will be kept on the determination of the nature and amount of stress developed under loads, and the way structures offer resistance to it. Being the most widely used construction materials, Reinforced Concrete (RC) and steel will be covered in detail, though masonry and timber will also be described briefly. Principles of statics and strength of materials including properties of materials, forces, equilibrium, stresses and strains are studied. Emphasis is placed on understanding the behavior of structural components associated with the construction process.

3 hrs. Lecture / Week

CM 226, Planning & Scheduling (3)

(Prerequisite: CM 214)

(Corequisite: CM 220)

The theory and the practice of planning, scheduling, and reporting of a project through the use of bar chart and Critical Path Methodology. The course provides students with a thorough understanding of project planning and scheduling principles in the construction industry. It introduces various planning and control techniques in an integrated planning and control system. It helps students develop understanding of time, cost, and resource management principles as well as ethics issues involved. The course also provides an overview of advanced project planning concepts.

4 hrs. Lecture / Week

CM 228, Estimating & Bidding for Construction Management (3)

(Prerequisite: CM 214)

(Corequisite: CM 220)

This course provides a comprehensive introduction to the estimating practices used in the construction industry. The content is organized around the CSI MasterFormat™ 2004. Students will have the opportunity to provide and prepare estimates using information extracted from BIM software, using ledger sheets, electronic spreadsheets, and others like Sage Timberline Office estimating software.

2 hrs. Lecture, 3 hrs. Lab / Week

APPENDIX “F”

IS 106, Sustainable Construction Practices (1)

The green environment has become an important consideration in the construction industry. Construction craft workers must understand how their daily activities at work and at home affect the green environment. This course explains how the things they do each day can make a difference. They will learn how buildings they construct affect the green environment and how to apply the principles of a green building rating system.

1 hr. Lecture / Week

ACC 201, Elementary Accounting (3)

(Prerequisite or Co-requisite: ENG 100)

(Recommended Prep: ENG 102)

This course introduces the student to accounting theory and the methods used to record and report financial information. It analyzes methods for valuing the assets, liabilities and ownership of an organization.

3 hrs. Lecture / Week

ENG 209, Business Writing (3)

(Prerequisite: “C” or higher in ENG 100 OR Placement in ENG 209–260)

A study of business and managerial writing. Practice in writing letters, memos, procedures and reports, including a recommendation report requiring research, problem definition and solution proposals.

3 hrs. Lecture / Week

SP 251, Principles of Effective Speaking (3)

(Prerequisite: “C” or higher in ENG 100)

This course provides students with the opportunity to improve their public speaking skills through extensive practice in speech preparation and delivery techniques. Emphasis is given to audience analysis, gathering supporting materials, and organization, in addition to other speechmaking techniques for a variety of speaking occasions.

3 hrs. Lecture / Week



UNIVERSITY OF HAWAII

BOARD OF REGENTS

March 19, 2012

Chancellor Michael Rota
Honolulu Community College
Chancellor's Office
874 Dillingham Blvd.
Honolulu, HI 96817

Dear Chancellor Rota,

This is to confirm that the Board of Regents, at its March 15, 2012 Board meeting, unanimously approved the Provisional Associate in Science Degree in Construction Management at Honolulu Community College.

Should you need further information, please feel free to contact me at (808) 956-8213 or via email at keith.amemiya@hawaii.edu.

Sincerely,

A handwritten signature in black ink that reads "Keith Y. Amemiya".

Keith Y. Amemiya, Esq.
Executive Administrator and
Secretary of the Board of Regents



Anita Huang <anitahua@hawaii.edu>

Fwd: code request

4 messages

Farah Doiguchi <farah@hawaii.edu>

Wed, Apr 11, 2012 at 2:16 PM

To: Anita Huang <anitahua@hawaii.edu>

Cc: Michael Barros <mbarros@hawaii.edu>

Aloha Anita,

I am submitting a program code request for our newly approved Construction Management program.

Please let me know if you have any questions or concerns. I will be happy to assist you in any way I can.

Sincerely,

--

Farah Doiguchi

Registrar

Honolulu Community College

874 Dillingham Blvd.

Honolulu, HI 96817

15 attachments **code request form const mgt.pdf**
184K **CM100.pdf**
294K **CM112.pdf**
255K **CM122.pdf**
267K **CM123.pdf**
254K **CM145.pdf**
236K **CM193V.pdf**
194K **CM214.pdf**
240K **CM216.pdf**
270K **CM224.pdf**
253K **CM226.pdf**
278K **CM228.pdf**
290K **Construction Management Proposal 3.1.12 revised.pdf**
1427K **Honolulu CC Provisional AS Degree in Construction Management Confirmation Letter (3-19-12).pdf**
25K

**Scanned from a Xerox multifunction device001.pdf**

32K

Anita Huang <anitahua@hawaii.edu>
To: Farah Doiguchi <farah@hawaii.edu>
Cc: Michael Barros <mbarros@hawaii.edu>

Thu, Apr 12, 2012 at 12:59 PM

Hi Farah,

Per our conversation, the CM major code is currently in use for Creative Media. In the interest of keeping the major and course alpha codes for Construction Management the same, may I suggest the following available codes:

CONS
CONM
CMGT
CNMG
CNST

Please let me know what code you would prefer to use.

Also just to confirm, this new AS degree is not financial aid eligible?

Could you please resend the Construction Management Proposal 3.1.12 revised.pdf (I had problems opening the file)?

Thanks,
Anita

[Quoted text hidden]

Farah Doiguchi <farah@hawaii.edu>
To: Anita Huang <anitahua@hawaii.edu>
Cc: Michael Barros <mbarros@hawaii.edu>

Thu, Apr 12, 2012 at 1:03 PM

Thank you, Anita,
We will discuss and get back to you.
Regarding Financial Aid, you are correct; the program is not Financial Aid eligible.
I will re-send the Proposal document to you shortly.

Farah

[Quoted text hidden]

Michael Barros <mbarros@hawaii.edu>
To: Anita Huang <anitahua@hawaii.edu>
Cc: Farah Doiguchi <farah@hawaii.edu>

Thu, Apr 12, 2012 at 1:14 PM

Anita, I spoke with the faculty, and they would like to go with the CMGT.

On Thu, Apr 12, 2012 at 12:59 PM, Anita Huang <anitahua@hawaii.edu> wrote:

[Quoted text hidden]



UNIVERSITY
of HAWAII
SYSTEM

Farah Doiguchi <farah@hawaii.edu>

Fwd: code request

1 message

Michael Barros <mbarros@hawaii.edu>
To: Farah Doiguchi <farah@hawaii.edu>

Tue, Apr 10, 2012 at 7:58 PM

----- Forwarded message -----

From: **Erika Lacro** <lacro@hawaii.edu>
Date: Thu, Apr 5, 2012 at 4:02 PM
Subject: Fwd: code request
To: Michael Barros <mbarros@hawaii.edu>

here you go

----- Forwarded message -----

From: **Erika Lacro** <lacro@hawaii.edu>
Date: Thu, Apr 5, 2012 at 3:44 PM
Subject: Re: code request
To: Peter Quigley <quigleyp@hawaii.edu>

thank you very much...this will do. Have a great weekend.

On Thu, Apr 5, 2012 at 2:51 PM, Peter Quigley <quigleyp@hawaii.edu> wrote:

Please consider program request approved ... Will this do? Sorry for delay been doing project for prez

Sent from my iPhone

On Apr 5, 2012, at 10:16 AM, Erika Lacro <lacro@hawaii.edu> wrote:

Hi there...

We got BOR approval for our Construction Management AS degree degree a couple week ago. We are in a bit of a rush to get our codes approved by IRO in order to have our classes ready for registration..which starts on Monday. Your signature is required on the form but it does say an email approval can serve in lieu of the signature in the form. Could you pretty please review the attached request and email me back your approval that I can forward to IRO so this can get into their hopper of work asap.

This would be very much appreciated. Thanks!

--

Erika L. Lacro
Vice-Chancellor, Academic Affairs
Honolulu Community College
808.845.9158

<code request form const mgt.pdf>

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Erika L. Lacro
Vice-Chancellor, Academic Affairs
Honolulu Community College
808.845.9158

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