Program/Unit Review at Hawai‘i Community College is a shared governance responsibility related to strategic planning and quality assurance. Annual and 3-year Comprehensive Reviews are important planning tools for the College’s budget process. This ongoing systematic assessment process supports achievement of Program/Unit and Institutional Outcomes. Evaluated through a college-wide procedure, all completed Program/Unit Reviews are available to the College and community at large to enhance communication and public accountability. Please see http://hawaii.hawaii.edu/files/program-unit-review/

Please remember that this review should be written in a professional manner. Mahalo.
**PART 1: PROGRAM DATA AND ACTIVITIES**

**Program Description** (required by UH System)

| Provide the short description as listed in the current catalog. | This program prepares students for employment with architectural firms, contractors, engineers, surveyors, or government agencies. Job responsibilities range from making accurate working drawings of buildings to assisting a surveying crew. |

**Comprehensive Review information** (required by UH System)

<table>
<thead>
<tr>
<th>Year</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>URL</td>
<td><a href="http://hawaii.hawaii.edu/files/program-unit-review/docs/2015_aec_comprehensive_program_review.pdf">http://hawaii.hawaii.edu/files/program-unit-review/docs/2015_aec_comprehensive_program_review.pdf</a></td>
</tr>
</tbody>
</table>

Provide a short summary of the CERC’s evaluation and recommendations from the program’s last Comprehensive Review.

The CERC recommends that in the future Reviews the Program expand explanatory narratives, include assessment data as well as a discussion of that data, and add specifics to the Action Plan and Budget Items.

Discuss any significant changes to the program that were aligned with those recommendations but are not discussed elsewhere in this report.

The AEC Faculty has been attending and will continue to attend Professional Development Workshops and training to expand in creating narratives and assessment data. We will continue to work with the Assessment Coordinator to improve in our writing of reports.
ARPD Data: Analysis of Quantitative Indicators (required by UH System)
Program data can be found on the ARPD website: http://www.hawaii.edu/offices/cc/arpd/

Please attach a copy of the program’s data tables and submit with this Annual Program Review (APR).

a) If you will be submitting the APR in hard copy, print and staple a copy of the data tables to the submission; the icon to print the data tables is on the upper right side, just above the data tables.

OR

b) If you will be submitting the APR in digital form (WORD or PDF), attach a PDF copy of the data tables along with the digital submission; the icon to download the data tables as a PDF is in the upper right of the screen, just above the data tables.

Analyze the program’s ARPD data for the review period.
Describe, discuss, and provide context for the data, including the program’s health scores in the following categories:

<table>
<thead>
<tr>
<th>Category</th>
<th>Health Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demand</td>
<td>Unhealthy</td>
</tr>
<tr>
<td></td>
<td>AEC believes the number of declared majors are incorrect and also the current CIP code limits the Architectural, Engineering &amp; CAD Technologies Program (AEC Tech) from obtaining higher scores which results in our Unhealthy status. AEC Tech students finds employment within other CIP categories, such as numerous positions with the County of Hawaii Engineering Department, State of Hawaii Department of Transportation Division, Hawaii Electric Light Company, as well as in Civil, Mechanical, Land Surveying, Landscape Architecture, Electrical Engineering positions. A few have also gained employment with several Building Suppliers such as Hawaii Planning Mill and Home Depot. AEC will most likely have an Unhealthy Demand score for future APR’s due to the limitations of the CIP Code. See Attachment 1 for details of employment offers for our students.</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Healthy</td>
</tr>
<tr>
<td></td>
<td>AEC Efficiency Indicators shows that the AEC program numbers have gone up significantly within the last year. We continue to have full enrollment in the fall with the same number of appointed faculty. Also, the Budget information has not been reported, thus giving us a healthy call.</td>
</tr>
<tr>
<td>Effectiveness</td>
<td>Healthy</td>
</tr>
<tr>
<td></td>
<td>AEC’s Successful Completion and Persistence Fall to Fall reflects a slight drop. However, Persistence Fall to Spring has gone up. The number of total</td>
</tr>
<tr>
<td>Overall Health Cautionary</td>
<td>The Demand (CIP Codes) category continues to negatively impact the Overall Health call of the Program.</td>
</tr>
<tr>
<td>---------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Distance Education</td>
<td>AEC continues to offer three on-line and one hybrid course, a total of four, DE courses. One of the on-line courses is offered twice in the Fall, one for majors and one for non-majors. The fill rate has gone up to 82%, however the Successful completion has dropped to 69%. This number is most likely due to the non-major nature of students in the course. We have found it has been a challenge in trying to reach and fully engage those students that are non-majors and off island. However, persistence from Fall to Spring has gone up to 71%.</td>
</tr>
<tr>
<td>Perkins Core Indicators (if applicable)</td>
<td>Indicators for this current academic year regarding nontraditional participation in both first and second year levels in the program are at 50%, the highest in the history of the AEC Program.</td>
</tr>
<tr>
<td>Performance Funding Indicators (if applicable)</td>
<td>AEC is pleased with the number of degrees awarded, but have some concerns about the number of Native Hawaiian students. Performance Measures indicates one, but there was more than one Native Hawaiian student enrolled.</td>
</tr>
</tbody>
</table>
| What else is relevant to understanding the program’s data? Describe any trends, internal/external factors, strengths and/or challenge that can help the reader understand the program’s data but are not discussed above. | Over the course of last year’s entering cohort group, and again in this year’s group, the AEC program has experienced an increasing number of situations regarding academic dishonesty occurring in the AEC courses, despite our strict statements in our AEC Program Policies, as well as referencing the College’s Academic Dishonesty Policies.  

We believe with the ongoing technological advancement of creating architectural drawings utilizing the computer and software (AutoCAD, Civil 3D, etc.), the students are finding it easy to copy another students electronic files and submit it as their own work. However, there is evidence whenever this has occurred, which has been followed by discussions with each student regarding the consequences of no credit for their assignment and a lowered overall course grade. This has resulted in students not passing the courses, or |
not meeting pre-requisite requirements at the next level, or has affected the students’ own decision to discontinue enrollment in the program.

The AEC faculty finds this growing occurrence very concerning. Therefore, we have increased our level of emphasizing the seriousness of this issue in all courses at the start of each new semester, which includes having each student sign the AEC policy confirming they understand and agree to abide by these policies. Reminder lectures repeating the entire AEC policies have also been delivered intermittently during the semester, in an attempt to mitigate this situation, with the intent to stop this behavior.

PROGRAM ACTIVITIES

Report and discuss all major actions and activities that occurred in the program during the review period, including the program’s meaningful accomplishments and successes. Also discuss the challenges or obstacles the program faced in supporting student success and explain what the program did to address those challenges.

For example, discuss:

- Changes to the program’s curriculum due to course additions, deletions, modifications (CRC, Fast Track, GE-designations), and re-sequencing;
- New certificates/degrees;
- Personnel and/or position additions and/or losses;
- Other changes to the program’s operations or services to students.

- Due to the recent past changes in the AEC curriculum reflected in last year’s Program Review, we are continuing to adjust to those new modifications. For the most part, these course changes are working out for the better. However, one area needs fine-tuning. This affects a few courses, which have been modified to now be a combination of several previous courses. We are finding if more class hours are added, it would be more effective in supporting student success. Continued assessment is ongoing.

- The AEC Program has found a reliable, effective and well-informed lecturer for our surveying courses. In addition we have secured the support of our former surveying instructor who has and will continue to work with this new lecturer. (Goal#1, last AY)

- A new HP large format plotter was purchased to replace the aging former plotter used to print the construction drawings for the Model Home project and student assignments. (Goal#3, last AY)

- Goal #2, last AY of renovating an existing storage space to establish a Green Lab, has not been accomplished.
PROGRAM WEBSITE
Has the program recently reviewed its website? Please check the box below that best applies and follow through as needed to keep the program’s website up-to-date.

☐ Program faculty/staff have reviewed the website in the past six months, no changes needed.

☐ Program faculty/staff reviewed the website in the past six months and submitted a change request to the College’s webmaster on ____________ (date).

☒ Program faculty/staff recently reviewed the website as a part of the annual program review process, found that revisions are needed, and will submit a change request to College’s webmaster in a timely manner.

Please note that requests for revisions to program websites must be submitted directly to the College’s webmaster at http://hawaii.hawaii.edu/web-developer

PART 2: PROGRAM ACTION PLAN

AY17-18 ACTION PLAN
Provide a detailed narrative discussion of the program’s overall action plan for AY17-18, based on analysis of the Program’s AY16-17 data and the overall results of course learning outcomes assessments conducted during the AY16-17 review period. This Action Plan should identify the program’s specific goals and objectives for AY17-18, and must provide benchmarks or timelines for achieving each goal.

G#1: Continue new student recruitment efforts. Timeline: Ongoing.

G#2: AEC faculty have and are closely monitoring those courses that were combined into one course during the past AY review period and will work through a solution to solving the course content versus sufficient class time issue stemming from this prior change, to achieve successful student learning goals. Timeline: next round of course modifications, AY17-18, also dependent on Goal #3, listed below.
G#3: The AEC PCC is in the process of assessing all course numbers, titles, credits, and descriptions to strive for total alignment. Plans also include a program name change.
Timeline: AY18-19

G#4: Discussions have begun with UHM’s School of Architecture Program’s proposal regarding a 2+3 concept, where students complete their first 2 years in the AEC Community College programs (HawCC and HonCC) and then 3+ years in School of Architecture’s Bachelors/ Masters/PHD degree programs. Timeline: unknown at this time, based on collaboration with UHM and their proposal.

**ACTION ITEMS TO ACCOMPLISH ACTION PLAN**

For each Action Item below, describe the strategies, tactics, initiatives, innovations, activities, etc., that the program plans to implement in order to accomplish the goals described in the Action Plan above.
For each Action Item below, discuss how implementing this action will help lead to improvements in student learning and their attainment of the program’s learning outcomes (PLOs).

**Action Item 1:**
To promote exposure in the community and generate interest to increase enrollment, the AEC program will continue to participate regularly in all college fair opportunities such as the annual HawCC Day events, and at the intermediate and high school levels such as we have done at recent presentations and exhibits at Kau High School, Hilo Intermediate, and at the Na Leo O‘pio Career Opportunities Annual Expo. We are also preparing for the upcoming presentations to the students at Honokaa High School. We regularly welcome student visitors to our program such as through the recent Kamehameha Schools Career Shadowing Experience; have hosted DOE Instructor visits; Construction Academy Program visitations; and will soon participate in the upcoming Honoka‘a CTE Instructors visitation followed by the above mentioned Honoka‘a High School visitation to their campus. All of these recruitment opportunities enhance our visibility and gets the message out to future students about what our program offers and how it is an option for them to consider.

PLO: By educating potential students, about the content of the AEC program, those entering will have a clearer understanding and be better prepared to meet all our PLOs.

**Action Item 2:**
Continue working together with Honolulu CC to align our common architecture and drafting courses, and at the same time maintaining our individual focus on our two separate concentrations: construction management for HonCC, and land surveying and civil engineering at HawCC. Thereby the benefits would be to offer a wider range of courses to both student groups at HonCC and HawCC.
PLO: This action item would encompass all 6 HawCC PLOs, and 1 HonCC PLO regarding construction management.

**Action Item 3:**
Continue collaboration with UHM’s School of Architecture on their proposal of the 2+3 concept. The AEC faculty members on both campuses feel this will pave a smooth pathway for our 2-year program students, to further their education in pursuing a higher degree.
PLOs: new PLOs would need development for this action item.

**RESOURCE IMPLICATIONS**

*NOTE: General “budget asks” are included in the 3-year Comprehensive Review. Budget asks for the following three categories only may be included in the APR: 1) health and safety needs, 2) emergency needs, and/or 3) necessary needs to become compliant with Federal/State laws/regulations.*

Provide a brief statement about any implications of or challenges due to the program’s current operating resources.
The program’s current operating resources for health and safety needs are sufficient.

**BUDGET ASKS**
For budget ask in the allowed categories (see above):

| Describe the needed item(s) in detail. | N/A |
| Include estimated cost(s) and timeline(s) for procurement. | N/A |
| Explain how the item(s) aligns with one or more of the strategic initiatives of 2015-2021 Strategic Directions: | N/A |

**PART 3: LEARNING OUTCOMES ASSESSMENTS**
For all parts of this section, please provide information based on CLO (course learning outcomes) or PLO (program learning outcomes) assessments conducted in AY16-17.

Evidence of Industry Validation and Participation in Assessment (for CTE programs only)
Provide documentation that the program has submitted evidence and achieved certification or accreditation (if applicable) from an organization granting certification/accreditation in the program’s industry/profession. If the program/degree/certificate does not have a certifying body, you must submit evidence of the program’s advisory committee’s/board’s recommendations for, approval of, and/or participation in the program’s assessment(s).
Please attach copy of industry validation for the year under review.

Courses Assessed
List all program courses assessed during AY16-17, including Initial and “Closing the Loop” assessments.

<table>
<thead>
<tr>
<th>Assessed Course Alpha, No., &amp; Title</th>
<th>Semester assessed</th>
<th>CLOs assessed (CLO#s)</th>
<th>PLO alignment (PLO#s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEC 100 Drafting Conventions and Materials</td>
<td>Fall 2016</td>
<td>2, 3</td>
<td>1, 5</td>
</tr>
<tr>
<td>AEC 233 Basic Architectural Studio A</td>
<td>Fall 2016</td>
<td>1, 2, 3</td>
<td>1, 3, 5</td>
</tr>
<tr>
<td>AEC 120 Residential Design and Construction Drawings</td>
<td>Spring 2017</td>
<td>1</td>
<td>1, 2, 4, 5</td>
</tr>
</tbody>
</table>

“Closing the Loop”
Assessed Course Alpha, No., & Title

<table>
<thead>
<tr>
<th>Semester assessed</th>
<th>CLOs assessed (CLO#s)</th>
<th>PLO alignment (PLO#s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BLPR 30F Blueprint Reading for Carpenters</td>
<td>Fall 2016</td>
<td>1, 2, 3</td>
</tr>
</tbody>
</table>

Assessment Strategies
For each course assessed in AY16-17 listed above, provide a brief description of the assessment strategy, including:
• a description of the type of student work or activity assessed (e.g., research paper, lab report, hula performance, etc.);
• a description of how student artifacts were selected for assessment (e.g., the assessment included summative assignments from all students in the course, OR a sample of students’ summative assignments was randomly selected for assessment based on a representative percentage of students in each section of the course);
• a brief discussion of the assessment rubric/scoring guide and the criteria/categories and standards used in the assessment.

Course Alpha/#: AEC 100
This course will be assessed by a group of AEC Tech faculty and lecturers. The artifact chosen will be two sets of drawings, one on Geometric Construction and the other on Orthographic Projection. These drawings were chosen to evaluate PLO’s #1 and #5. A rubric will be used to determine results. There are currently 13 students enrolled in AEC 100 and all students’ assignments will be collected to complete assessment.

Course Alpha/#: AEC 120
This course will be assessed by a group of AEC Tech faculty and lecturers. The artifact chosen will be the final project, a full set of construction drawings design by individual students. These drawings were chosen to evaluate PLO #1. A rubric will be used to determine results. There are currently 10 students enrolled in AEC 100 and all students’ assignments will be collected to complete assessment.

Course Alpha/#: AEC 233
The artifact chosen for this assessment will be a Figure Ground assignment that consists of a three dimensional cube and a poster board display. This assignment helps the students to become versatile in thinking about multiple ideas at the same time such as when preparing drawings for a client in the Architectural field. AEC hopes to have all members of the Advisory committee assess this artifact. We will be using a rubric to determine assessment results. All 7 students enrolled in this course will have their assignment assessed.

Expected Levels of Achievement
For each course assessed in AY16-17 listed above, state the standard (benchmark, goal) for student success for each CLO assessed AND the percentage of students expected to meet that standard for each CLO.
Example: “CLO#1: The standard for student success is that students will answer 80% of the questions on the final exam related to CLO#1 correctly. The expectation is that 85% of students will meet this standard for CLO#1.”
Example: “CLO#4: The standard for student success is that students will be able to perform skills associated with CLO#4 with 80% proficiency. The expectation is that 75% of students will meet this standard for CLO#4.”
<table>
<thead>
<tr>
<th>Assessed Course Alpha, No., &amp; Title</th>
<th>Assessed CLO#</th>
<th>Standard for Success</th>
<th>% of Students Expected to Meet Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>AEC 100</td>
<td>2, 3</td>
<td>Students will receive a grade of 80% or higher on their drawings</td>
<td>85% will meet or exceed</td>
</tr>
<tr>
<td>AEC 120</td>
<td>1</td>
<td>Students will receive a grade of 80% or higher on their drawings</td>
<td>85% will meet or exceed</td>
</tr>
<tr>
<td>AEC 233</td>
<td>1, 2, 3</td>
<td>Students will receive a grade of 80% or higher on their final project</td>
<td>85% will meet or exceed</td>
</tr>
<tr>
<td>BLPR 30F</td>
<td>1, 2, 3</td>
<td>Students will answer 80% of all questions on quiz correctly</td>
<td>85% will meet or exceed</td>
</tr>
</tbody>
</table>

Results of Course Assessments

For each course assessed in AY16-17 listed above, provide:
- a statement of the quantitative results;
- a brief narrative analysis of those results.

Course Alpha/#: AEC 100

AEC faculty and lecturers (Gayle Cho, Donna De Silva, Malia Souza, Taylor Cockerham) have met to review all 13 students’ manual drawings (artifacts chosen) on Geometric Construction and Orthographic Projection. Using the rubric it was determined that 10 out the 13 students have met or exceeded expectations. Line weights were used correctly, drawings were organized in the proper manner and it was clear that they understood all assignments. Three of these students had difficulty in aligning their drawings correctly and using proper lines. This resulted in only 77% meeting or exceeding expectations which is below AEC’s goal of 85%. This course had been modified and lengthened to allow students more lab time to complete drawing assignments. This has helped to keep most students on track with assignment deadlines. Having lectures prior to drawing assignment allows for better understanding of what they are drawing. Open lab time allows students to work together when they are having difficulty. As students get to know each other they tend to get distracted from drawing and some students start to fall behind. Also, class starts at an early time and many students are having difficulty arriving on time. Not having enough samples materials has also been a challenge. When we discuss building materials, many students are unfamiliar with these items.

Course Alpha/#: AEC 120
AEC faculty and lecturers (Gayle Cho, Donna De Silva, Malia Souza, Taylor Cockerham) have met to assess the artifacts collected. There were 10 students enrolled in this course and all of their working drawings were collected for review. Out of the ten students only 7 were full sets. This shows just 70% meeting or exceeding AEC’s 85% goal of meeting or exceeding expectations. In this course students are to create a full set of working drawings for a single family dwelling that they have designed. Not all of the students were able to complete a full set and from the remaining three, two sheets were missing. Other considerations discussed were line weights used and the understanding and completion of each drawing page needed to complete the set. Most of the students were comprehending material covered and were able to incorporate that into their drawings. Students are given checklists for each individual sheet to help with the completion of that drawing. The length of the class time has increased allowing them more lab time. This course prepares students for what is expected in construction drawings to obtain a building permit for construction. Due to the curriculum change which combined two courses into one, this was the first semester that incorporated the change. Although students had more time to complete assignments, distractions and attritions kept students from keeping deadlines. Also many sheets turned in were incomplete. Cell phone use is a major problem for this course. Students are allowed to listen to music with one earbud while in open lab. For some students this helps them focus and keeps them from peer distraction, however, other students get distracted and tend to watch videos or other forms of entertainment.

Course Alpha/#: AEC 233

AEC faculty, lecturers, and Advisors (Gayle Cho, Donna De Silva, Malia Souza, Taylor Cockerham, Matt Okuno, and Jordanah AhPuck) have met to review the artifacts chosen, Figure Ground assignment which consists of a three dimensional cube along with a poster board. AEC was able to obtain only 4 of the 7 artifacts from students for assessment. Out of the 4 collected advisors felt students understood the assignment and was able to visualize a 3D object by using multiple ideas at the same time. Poster boards were done correctly and professionally. It aligned with all cubes created. Advisors felt that all CLO’s were met for this artifact that students created (4 out of 4 = 100%). Advisors felt it was an important assignment because of the similarity to designing and creating working drawings consists of multiple ideas coming together to create one final project. This course challenges students to brainstorm and use these ideas for different purposes. This course helps students to understand the designing process and gives them many opportunities to design multiple spaces, including office buildings, studios, dormitory spaces in a boat, shopping centers, as well as outdoor areas. Due to limited space in the classroom, students have a hard time to complete their projects in time. They are confined to their desk area which already is filled with construction drawings and other course material. If there was a specific “model building” area in the department this would help students tremendously. They use many different types of tools and materials to create these projects. A separate room would allow students to leave their projects as is to attend other courses and come back to continue where they left off.

Course Alpha/#: BLPR 30F

AEC faculty and lecturers (Gayle Cho, Donna De Silva, Malia Souza, Taylor Cockerham) have met to reassess this course. There were 19 students enrolled and quizzes collected from all 19 have shown improvement from the prior years’ results. All of the students achieved a high grade most likely due to the changes made in instruction methods. Students were given weekly lettering and scaling assignments which helped them retain this information. Many lectures were given to review prior lessons before continuing on to new material. The attendance/tardiness issues continued even after imposing more severe penalty for being absent or tardy. This has not impacted students’ concern at all. Many of these students had young children or night-time jobs. This continues to be a problem. Changes that has been made to instructional methods has helped to improve in student success. Students were more engaged and encouraged and confident. Students were less hesitant to share in discussions, and this changed
the morale of the entire class. We will continue to repeat lessons to clarify any misunderstanding of assignments and to help with knowledge retention for all students. More group work will be given, which allows students to be more comfortable with attending class. Not all of the students are enrolled in Carpentry at the same time so this helps them to get to know each other. Instead of imposing a severe penalty on grades for attendance, we will try to do the opposite and give bonus points in some form for being punctual and ready to learn. Attrition is something that has been a problem for most AEC courses and we continue to find ways to accommodate students the best we can.

Other Comments

<table>
<thead>
<tr>
<th>Include any additional information that will help clarify the program’s course assessment results, successes and challenges.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Successes:</strong> An area that is currently on the rise in our industry is a positive upwards trend in business and job openings. Over the past several semesters, we have received an increase in calls, in-person employer visitations, and email messages from them requesting our student graduates apply to these employers’ available positions. Many of these are from employers who currently have our past graduates employed there. The AEC program views this as a great success indicator for our program, demonstrating we are imparting the necessary knowledge and skills required for our graduates to perform effectively in the workplace. (see attachment)</td>
</tr>
</tbody>
</table>

| Challenges: Instilling integrity, honesty and personal values in the entering students each fall semester have increasingly become a challenge. The number of academic dishonesty cases has been an issue in the recent semesters. The serious lack and decline of these personal characteristics are now affecting the way we teach and manage assignments in the courses. To curb academic dishonesty and in having to keep each student in check because of this possible generational trend of electronically well informed first-time college students, spending more time and effort checking unnecessary file background information with every computer generated drawing assignment submitted by these students is a great challenge for the AEC faculty. |

Discuss, if relevant, a summary of student survey results, CCSSE, e-CAFE, graduate-leaver surveys, special evaluations, or other assessment instruments that are not discussed elsewhere in this report. The multiple survey results seem to be on an average plateau as in the past, and student comments have been discussed with respective instructors focusing on the importance of student success first and foremost.

Brief narrative summary of ecafe and or CCSSE/any letter from industry or former students thank yous etc.

- Recent thank you letter from 2nd year student Cheyenne Chun. (see Attachment 1)
Messages from employers seeking our graduates. (see Attachment 1)

Next Steps – ASSESSMENT ACTION PLAN for AY17-18

Describe the program’s intended next steps to improve student learning, based on the program’s overall AY16-17 assessment results.

Include any specific strategies, tactics, activities or plans for improvement to program or course curriculum or instructional strategies, or changes in program or course assessment practices.

- Complete initial assessments 2 in fall and 2 in spring
- Clean up assessment status report and assessment schedule
- Keep on track with reports.
- Although no immediate plans to revise CLOs/PLOs in curriculum, this may be impacted by our upcoming discussions with HonCC and UHM School of Architecture and may possibly also include UHM College of Engineering.

PART 4: ADDITIONAL DATA

Cost Per SSH (to be provided by Admin)

Please provide the following values used to determine the total fund amount and the cost per SSH for your program:

General Funds = $________
Federal Funds = $________
Other Funds = $________
Tuition and Fees = $________

External Data*

If your program utilizes external licensures, enter: N/A

Number sitting for an exam _____
Number passed _____

*This section applies to NURS only.
Attachment to Assessment for Architectural, Engineering and CAD Technologies Program

List of recent employers that have emailed, called, or dropped by to the classroom to inquire about available students or recent graduates who may be interested in applying for a position at their company during the past two semesters: Fall 2017 & Spring 2017, in reverse chronological order. (See hard copy of email messages.)

1. **Nov. 2, 2017**: Robert Shirai, Island Survey Hilo, HI (came to classroom in person to inquire)

2. **Oct. 10, 2017**: Cassie Fukuhara, Honsador Lumber, Hilo, HI (see attached email)

3. **Oct. 9, 2017**: Engineering Partners, Hilo HI (see attached email)

4. **Sept. 18, 2017**: Murakami Roofing (see attached email)

5. **Sept. 11, 2017**: Imata & Associaes, Inc. Hilo HI (see attached email)

6. **July 19, 2017**: County of Hawaii Planning Dept., Hilo Internship (see attached email)

7. **July 18, 2017**: Queen Construction, Kailua-Kona, HI (see attached email)

8. **July 17, 2017**: PGV, Pahoa, HI (see attached email)

9. **April 19, 2017**: Isemoto Contracting Co., Ltd. (see attached email)

10. **April 9, 2017**: DKS Drafting (came to classroom in person to inquire)

11. **Mar. 9, 2017**: Telecable Systems, Inc. Kailua-Kona, HI (see attached email)
Hi Gayle,

My name is Cassie Fukuhara and I am an employee of Honsador Lumber. We are in the process of looking for a draftsperson and we wanted to know if you have any former students that you would recommend us calling to see if they would be interested in joining our team?

We look forward to your response.

Thank you.

Cassie Fukuhara
Inside Sales

Direct Line: (808)930-8231
100 Kukila Street | Hilo, HI 96720
Ph: (808) 961-6000 | Fax: (808) 961-5892
Email: cfukuhara@honsador.com | www.honsador.com
Hi Gayle – Hope all is well with you. One of our electrical drafters is leaving at the end of the month and we are looking to fill their position.

If you have any candidates in mind, please let us know. Potential candidates can email their resumes directly to me. my email address.

Thanks!

Bri Simonian │ Administration & HR Manager
ENGINEERING PARTNERS
Direct (808) 930-7821 │ Main (808) 933-7900
bri.simonian@epinc.pro │ www.epinc.pro
Hawai‘i │ Las Vegas

Privileged E-Mail Communication:
This message (including any attachments) is covered by the Electronic Communications Privacy Act, 18 U.S.C. 2510-2521. It may contain confidential information. It is the property of Engineering Partners, Inc. If you are not the intended recipient you must delete this message. You are hereby notified that any disclosure, copying, or distribution of this message is prohibited by law.
We are currently looking for someone to fill a surveyor position ASAP. Do you know of someone who has some knowledge and is in need of employment?

Mahalo,
Imata & Associates, Inc.
Laureen Hudman
171 Kapiolani Street
Hilo, Hawaii  96720-2606

P: (808) 935-6827
F: (808) 935-3186
E: laureen@imata.biz
Good morning Gayle & Donna,

I’ve attached a 1-page PDF with information about the position we hope to fill with an eager-to-learn, recent program graduate. Thanks for your help in getting the word out!

Mahalo,

Deseret Kastner
Administrative Assistant
Queen Construction
73-5593B Olowalu St.
Kailua Kona, HI 96740
(808) 324-4433 Office
(808) 324-1129 Fax
Hello Donna,

I understand you are the contact person at UH Hilo for the Drafting School. We are interested in hiring an intern to work on and update our existing Piping and Instrumentation Drawings (P&ID’s). Maybe one of your students that recently graduated from your class or a student that you feel that can handle a job like this would be interested in working at our plant. I understand most if not all of your students focus more on the residential side rather than the industrial side of these type of drawings so this may be a challenge. I have added a small example below on what this person would be working on. If you are not the person I should be in correspondence with, please forward this email to a person that can assist me. I appreciate all your help.

Ron Quesada | Maintenance Manager | rquesada@ormat.com
Main: (808) 965-6233 Ext. 52848 | Cell: (808) 430-8679
POB 30, Pahoa, HI 96778
Aloha Gayle and Donna,

I’m not sure if you are the right persons to send this email to as I got your information on HCC’s website for the Architectural, Engineering & CAD Tech program. But wanted to let you know that our company, Isemoto Contracting, has entry-level openings for Junior Project Engineer at our Hilo and Kona office. Must have valid drivers’ license with clean driving abstract (employer will verify) and dependable vehicle transportation. Isemoto Contracting is the largest construction company based on the Big Island, consistently ranking in top 25 largest contractors in the State. Type of work includes heavy sitework, buildings, roads & highways and utilities. If you know any good candidates, please have him/her email resume to isemoto@isemotocontracting.com and indicate which office location, Hilo or Kona, applying for.

Or if there’s someone else I should direct this email to, please let me know.

Mahalo!
Aloha Gayle and Helen-

Hey its Rachel Louis I recently left Hawaii CC to work for Telecable Systems Inc. Our company does a great deal of contract work for HELCO and Oceanic Time Warner Cable as well as other companies here on the Big Island and on Kauai. We are interested in creating 2 junior engineer positions. One position would be located in Hilo and the other in Kona where we would like to provide a college student interested in this type of field an opportunity to learn this type of work. From what we understand Gayle your son works for Oceanic in Oahu so if this is something that you feel would benefit Hawaii Community College and a couple of your students interested in this type of field or industry please feel free to contact me directly and I can work with you on the necessary paperwork to facilitate that.

I can be reached at our Kona office at 329-2480

Mahalo...

Rachel Louis
Office Manager
Telecable Systems, Inc
329-2480
Hello Ms. Cho and Ms. De Silva,

I wanted to meet with you about developing some student internship opportunities with the County of Hawai‘i. I am certainly focused on Planning arena, but want to be thoughtful about all other areas of County government.

Attached is a sheet I passed out to the Mayor’s cabinet today, which I have tried to write down some of my thoughts about a summer internship program for next year.

Note, Cheyenne Chun, a past student of Ms. De Silva, is interning with us right now. Hence, I talked to her and she encouraged me to contact the two of you.

Please suggest a day and time. More than happy to meet you on your campus because I have not visited the campus yet.

Thank you,
Michael

Michael Yee
Planning Director
County of Hawaii Planning Department
Aupuni Center
101 Pauahi Street, Suite No. 3
Hilo, Hawaii 96720
Phone: (808) 961-8126
Fax: (808) 961-8742
email: michael.yee@hawaiicounty.gov
Established roofing contracting company is looking for an experienced Roofing Estimator for all phases of residential roofing.

Minimum Qualifications:
- Roofing Estimating experience required
- Basic computer skills
- Good communication skills
- Drivers License and clean abstract
- Ability to carry and climb a ladder to measure and inspect roofs

Compensation package is based upon experience and will be discussed at time of interview.

We are looking for an immediate hire. Must live or be willing to relocate to Oahu.

Job Type: Full-time

If interested, please contact:
Murakami Roofing, LLC
45-558 Kamehameha Hwy C-18
Kaneohe, HI 96744
main: 808.348.8270, fax: 808.356.0727
Ms. Cho,

I would like to thank you for teaching our class and me personally. For all that I have learned, I greatly appreciate what you do for us.

I'm thankful to say that I have been awarded the HCC Alumni and Friends Scholarship and I have you to thank. So thank you Ms. Cho, for taking the time to write a letter of rec.

I'm determined and excited to learn more from you!

Many thanks,

Cheyenne Chun
# Hawaii Community College
## 2017 Instructional Annual Report of Program Data
### Architectural Engineering & CAD Tech

### Part I: Program Quantitative Indicators

#### Overall Program Health: Cautionary

Majors Included: AEC  |  Program CIP: 15.1303

<table>
<thead>
<tr>
<th>Demand Indicators</th>
<th>Program Year</th>
<th>Demand Health Call</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 New &amp; Replacement Positions (State)</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>2 *New &amp; Replacement Positions (County Prorated)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3 Number of Majors</td>
<td>26</td>
<td>39</td>
</tr>
<tr>
<td>3a Number of Majors Native Hawaiian</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>3b Fall Full-Time</td>
<td>88%</td>
<td>59%</td>
</tr>
<tr>
<td>3c Fall Part-Time</td>
<td>12%</td>
<td>41%</td>
</tr>
<tr>
<td>3d Fall Part-Time who are Full-Time in System</td>
<td>0%</td>
<td>4%</td>
</tr>
<tr>
<td>3e Spring Full-Time</td>
<td>63%</td>
<td>76%</td>
</tr>
<tr>
<td>3f Spring Part-Time</td>
<td>37%</td>
<td>24%</td>
</tr>
<tr>
<td>3g Spring Part-Time who are Full-Time in System</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>4 SSH Program Majors in Program Classes</td>
<td>418</td>
<td>587</td>
</tr>
<tr>
<td>5 SSH Non-Majors in Program Classes</td>
<td>0</td>
<td>25</td>
</tr>
<tr>
<td>6 SSH in All Program Classes</td>
<td>418</td>
<td>612</td>
</tr>
<tr>
<td>7 FTE Enrollment in Program Classes</td>
<td>14</td>
<td>20</td>
</tr>
<tr>
<td>8 Total Number of Classes Taught</td>
<td>21</td>
<td>26</td>
</tr>
</tbody>
</table>

#### Efficiency Indicators

<table>
<thead>
<tr>
<th>Efficiency Indicators</th>
<th>Program Year</th>
<th>Efficiency Health Call</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 Average Class Size</td>
<td>8.8</td>
<td>8.2</td>
</tr>
<tr>
<td>10 *Fill Rate</td>
<td>70.6%</td>
<td>67.2%</td>
</tr>
<tr>
<td>11 FTE BOR Appointed Faculty</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>12 *Majors to FTE BOR Appointed Faculty</td>
<td>13</td>
<td>19.2</td>
</tr>
<tr>
<td>13 Majors to Analytic FTE Faculty</td>
<td>14.6</td>
<td>14.6</td>
</tr>
<tr>
<td>13a Analytic FTE Faculty</td>
<td>1.8</td>
<td>2.6</td>
</tr>
<tr>
<td>14 Overall Program Budget Allocation</td>
<td>Not Reported</td>
<td>Not Yet Reported</td>
</tr>
<tr>
<td>14a General Funded Budget Allocation</td>
<td>Not Reported</td>
<td>Not Yet Reported</td>
</tr>
<tr>
<td>14b Special/Federal Budget Allocation</td>
<td>Not Reported</td>
<td>Not Yet Reported</td>
</tr>
<tr>
<td>14c Tuition and Fees</td>
<td>Not Reported</td>
<td>Not Yet Reported</td>
</tr>
<tr>
<td>15 Cost per SSH</td>
<td>Not Reported</td>
<td>Not Yet Reported</td>
</tr>
<tr>
<td>16 Number of Low-Enrolled (&lt;10) Classes</td>
<td>15</td>
<td>19</td>
</tr>
</tbody>
</table>

*Data element used in health call calculation

Last Updated: October 29, 2017

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### Effectiveness Indicators

<table>
<thead>
<tr>
<th>Program Year</th>
<th>14-15</th>
<th>15-16</th>
<th>16-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Successful Completion (Equivalent C or Higher)</td>
<td>92%</td>
<td>89%</td>
<td>71%</td>
</tr>
<tr>
<td>Withdrawals (Grade = W)</td>
<td>6</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>*Persistence Fall to Spring</td>
<td>84%</td>
<td>54.3%</td>
<td>67.7%</td>
</tr>
<tr>
<td>Persistence Fall to Fall</td>
<td>78.2%</td>
<td>34.1%</td>
<td>25%</td>
</tr>
<tr>
<td>*Unduplicated Degrees/Certificates Awarded Degrees Awarded</td>
<td>5</td>
<td>11</td>
<td>13</td>
</tr>
<tr>
<td>Certificates of Achievement Awarded</td>
<td>2</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>Advanced Professional Certificates Awarded</td>
<td>3</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Other Certificates Awarded</td>
<td>5</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>External Licensing Exams Passed</td>
<td>Not Reported</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Transfers to UH 4-yr</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Transfers with credential from program</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Transfers without credential from program</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

**Healthy**

### Distance Education: Completely On-line Classes

<table>
<thead>
<tr>
<th>Program Year</th>
<th>14-15</th>
<th>15-16</th>
<th>16-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Distance Education Classes Taught</td>
<td>0</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Enrollments Distance Education Classes</td>
<td>N/A</td>
<td>44</td>
<td>32</td>
</tr>
<tr>
<td>Fill Rate</td>
<td>N/A</td>
<td>67%</td>
<td>82%</td>
</tr>
<tr>
<td>Successful Completion (Equivalent C or Higher)</td>
<td>N/A</td>
<td>84%</td>
<td>69%</td>
</tr>
<tr>
<td>Withdrawals (Grade = W)</td>
<td>N/A</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Persistence (Fall to Spring Not Limited to Distance Education)</td>
<td>N/A</td>
<td>65%</td>
<td>71%</td>
</tr>
</tbody>
</table>

### Perkins IV Core Indicators 2015-2016

<table>
<thead>
<tr>
<th>Goal</th>
<th>Actual</th>
<th>Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>1P1 Technical Skills Attainment</td>
<td>92.00</td>
<td>93.75</td>
</tr>
<tr>
<td>2P1 Completion</td>
<td>51.00</td>
<td>43.75</td>
</tr>
<tr>
<td>3P1 Student Retention or Transfer</td>
<td>81.00</td>
<td>62.50</td>
</tr>
<tr>
<td>4P1 Student Placement</td>
<td>63.87</td>
<td>50.00</td>
</tr>
<tr>
<td>5P1 Nontraditional Participation</td>
<td>22.00</td>
<td>28.57</td>
</tr>
<tr>
<td>5P2 Nontraditional Completion</td>
<td>22.00</td>
<td>54.55</td>
</tr>
</tbody>
</table>

### Performance Measures

<table>
<thead>
<tr>
<th>Program Year</th>
<th>14-15</th>
<th>15-16</th>
<th>16-17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Degrees and Certificates</td>
<td>5</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Number of Degrees and Certificates Native Hawaiian</td>
<td>1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Number of Degrees and Certificates STEM</td>
<td>5</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Number of Pell Recipients</td>
<td>14</td>
<td>22</td>
<td>10</td>
</tr>
<tr>
<td>Number of Transfers to UH 4-yr</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

*Data element used in health call calculation

1PY 16-17; Pell recipients graduates not majors

Last Updated: October 29, 2017
Facilitator: Gayle Cho AEC Instructor

Members Present: Donna DeSilva (AEC), Malia Souza (AEC)

Guest(s): Jordanah AhPuck – Fleming & Associates; Matt Okuno – County of Hawaii Reconstruction of Roads/Hilo

### AGENDA ITEM

<table>
<thead>
<tr>
<th>Information/Announcements</th>
<th>DISCUSSION/NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Assessment</strong></td>
<td></td>
</tr>
</tbody>
</table>
| a) Results of program and course assessment | • New curriculum for AEC finalized  
• Gayle reviewed last year’s discussions  
• English 100 requirement is being maintained; advisors agreed that communication skills, both written and speaking are vital in this field  
• AEC 241: Introduction to Building Services & BIM  
  1. Jordanah: Revit/BIM is both a complex, sophisticated software and very expensive  
  2. Matt: Does not believe the County of Hawaii will use Revit because the old timers at the job do not want to learn a new program and there are too many files to change over  
  3. Matt suggested Auto CAD is important and needed because all files sent to the county have to be Auto CAD and software must be within so many years of the version used by the county |
<table>
<thead>
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<th>AGENDA ITEM</th>
<th>DISCUSSION/NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Review Program Learning Outcomes (PLOs), Course Learning Outcomes (CLOs) – verify that achievement by a student will meet industry needs for entry-level employment.</td>
<td>• Students at HawCC have a good foundation and understanding of what architectural design and drafting is and what is being taught in the AEC program equips students for entry level positions out in the field.</td>
</tr>
</tbody>
</table>

2. **Review of courses and curriculum**  
   a) Program CIP Code (if changed in past year)  
   b) Plans for updates, new directions for the program  
   c) Industry feedback regarding curriculum  
   • There are no CIP changes planned for the AEC Program  
   • Jordanah asked if a GEO Technical certificate was offered and the answer was no

3. **Industry Report**  
   a) Trends – What’s new in your industry? How will this affect our program? (new skills, procedures, technology changes, etc.) – Short or long term  
   • Matt: The county will start hiring people who can draft  
   • Gayle: Manual drafting is a lot to learn and a lot of work; it is taught in the beginning of the course  
   • Jordanah suggested students keep up with manual drawing and every class should have a drafting assignment  
   • Matt: Students should practice role playing; 1 student be the mechanical engineer and the other student be a contractor. There is a lot of interaction between engineers and contractors out in the field and this role playing will be beneficial to AEC students  
   • Jordanah: Students should be able to communicate clearly so they understand exactly what needs to be drawn/drafted
<table>
<thead>
<tr>
<th>AGENDA ITEM</th>
<th>DISCUSSION/NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Jordanah: Students should sharpen their tools usage in computers; Auto CAD, BIM, and manual drafting. These should be comfortable practices for all graduates of the AEC Program.</td>
</tr>
<tr>
<td>b) Employment forecast – Jobs available short term and long term</td>
<td>• In early 2020 the prediction is that there will be a shortage of licensed engineers; older workers will be retiring and jobs will need to be filled</td>
</tr>
</tbody>
</table>

Meeting Adjourned: 6:00 p.m.

Notetaker: Rae Pacheco