STUDENT OUTCOMES COMMITTEE OF THE BOARD OF TRUSTEES

MINUTES

Thursday, September 6, 2018 1:30 p.m. Conference Room M2-34

Presiding:	Ms. Hernández Vélez
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Committee

Members: Ms. Fulmore-Townsend, Rep. Roebuck

College

Members: Ms. de Fries, Dr. Gay, Dr. Generals, Dr. Hirsch, Dr. Roberts, Ms. Zellers

Guests: Mr. Bertram, Dr. Carter, Ms. Freeman, Ms. Frizell, Dr. Sweet

(1) <u>Executive Session</u>

There were no agenda items for the Executive Session.

(2) <u>Public Session</u>

(a) Approval of the Minutes of June 7, 2018 The minutes were approved unanimously.

(b) Academic Program Reviews: Building Science, Architecture, Interior Design, Energy Conservation Academic Certificate

Ms. Frizell provided a brief overview of the review. She described how the enrollments for the Architecture and Interior Design programs have increased and are expected to continue to increase. The programs have a thorough assessment plan under the current department head, with aligned assessments and data collection to apply to program improvement. Regarding increasing enrollments, Dr. Sweet explained that both are select programs and have been growing. Architecture is a well-respected program in the community and had its highest enrollments in Fall 2018. Both programs have strengthened articulation agreements with four-year institutions and have active advisory boards, with the goal of having students who are well-prepared to transfer. She added that enrollment growth may be due to fine tuning the coursework, a different direction under the current department head, and internal marketing that highlights career possibilities. The academic pathway also has a dedicated advisor assigned to it. Additionally, the programs will no longer require

that students pass a required introductory course before being able to enroll in the program. Removing this barrier should further increase enrollments.

Regarding the Building Science degree and the Energy Conservation Academic Certificate, Ms. Frizell noted that they are not performing as well. The coordinator position was vacant for a time and while the position was filled last year, it is vacant again. The programs have not been able to make progress on curricular edits, increasing industry connections, and strengthening marketing efforts. Per an action item in the reviews, the programs should examine their viability within the next academic year. Mr. Bertram explained that because enrollments are so small for these programs, increasing viability is the focus, as opposed to the make-up of the student population. Mr. Bertram also indicated that the programs would be interested in pursuing connections with high school programs, when possible.

Action: The Student Outcomes Committee unanimously recommended that the Board of Trustees accept the program review with approval for five years for the Interior Design and Architecture programs. The Committee deferred action for the Building Science and Energy Conservation programs; the programs should submit a follow-up report addressing the review recommendations for the November 2018 meeting.

(c) Academic Program Review Update: Computer Information Systems-Information Technology, Network and Systems Administration Proficiency Certificate, Computer Science, Computer Programming and Software Development Proficiency Certificate

Dr. Hirsch explained that when the academic program reviews were discussed at the last meeting, the Committee noted the lack of assessment materials submitted for the review and as such delayed action. Ms. Freeman gave an overview of the status of assessment in the programs. Many faculty have turned in course assessments, so that approximately fifty percent of outstanding reports were recently submitted and are being put into the department's Canvas repository. Any remaining reports should be submitted by the end of September. Ms. Freeman explained that because of the "state of things," she will do the program learning outcomes submission. Dr. Carter agreed that there has been an increase in submissions and is optimistic the assessments will be completed and that Ms. Freeman will complete the program learning outcomes assessments.

Action: The Student Outcomes Committee unanimously recommended the program submit a detailed report on the status of the assessments for the October 2018 meeting. The report should also include an update on efforts to increase the number of female students.

(d) New Business

There was no new business.

Next Meeting

The next meeting of the Student Outcomes Committee of the Board is scheduled for October 4, 2018 at 1:30 p.m. in Conference Room M2-34.

Attachments:

Minutes of June 7, 2018 Interior Design Program Review Architecture Program Review Building Science Program Review Energy Conservation Certificate Program Review

STUDENT OUTCOMES COMMITTEE OF THE BOARD OF TRUSTEES

MINUTES

June 7, 2018 1:30 p.m. Conference Room M2-34

Presiding: Dr. Rényi

Committee

Members: Ms. Fulmore-Townsend, Ms. Hernández Vélez, Rep. Roebuck

College

Members: Ms. de Fries, Dr. Gay, Dr. Generals, Dr. Hirsch, Dr. Roberts

Guests: Dr. Carter, Ms. Freeman, Ms. Frizell

(1) <u>Executive Session</u>

There were no agenda items for the Executive Session.

(2) <u>Public Session</u>

- (a) Approval of the Minutes of May 3, 2018 The minutes were approved unanimously.
- (b) Computer Information Systems-Information Technology A.A.S and Network and Systems Administration Proficiency Certificate, Academic Program Review and Computer Science A.S. and Computer Programming and Software Development Proficiency Certificate, Academic Program Review

Dr. Carter described how both programs are very important to Philadelphia's technology community. They provide opportunities for students to find good jobs and to transfer to four-year institutions, such as Drexel University. Ms. Hernández Vélez expressed concern about the comment in the report that the industry is predominantly male to explain the low percentage of female students. The program should be trying to impact the current status. Ms. Freeman, the department head for the computer technology-related programs, responded that the programs are trying to showcase women in the department. They are also trying to recruit women, for example, by going to open houses for College programs. Ms. Hernández Vélez asked about supports for female students. Ms. Freeman noted that the programs are hoping to establish a computer technology club and the faculty have an open-door policy, but

that such efforts are for all students and do not focus specifically on female students. Ms. Fulmore-Townsend asked if the programs have solicited any feedback from or done any assessments with female students. Dr. Carter stated that the programs would like to see events that bring potential female students onto the campus. The College has an Automotive Technology summer camp program, which draws female students to attend. She would like to see an increase in such activities and that the programs need faculty who will devote efforts to them. Dr. Rényi noted that robotics competitions have been popular among young women in Philadelphia and that the College's Engineering Program has a female study group; the Computer Technologies programs should consider such options. The programs should also develop five-year goals and plans for increasing female enrollments.

Dr. Rényi indicated that the Committee has concerns about assessment of student learning across the programs. Ms. Freeman responded that the programs assess each course each semester and have collected internal assessment data. Many of the recent curriculum revisions were based on assessment results and industry needs. Faculty meet often about assessments to ensure that all student learning outcomes are being met. Dr. Rényi noted that this work has not been documented, which makes it seem that assessments are in fact not taking place. The Student Outcomes Committee and the Board of Trustees need to review evidence in order to conduct program reviews. Ms. Freeman responded that the programs do assessments and do have data, but that they have chosen not to submit them under the current Contract circumstances. Ms. Hernández Vélez stressed that it impacts the total picture for the College when programs do not provide assessment data. Ms. Fulmore-Townsend said that she found it very disturbing that it appears that the data are being "held hostage," which is the message the Committee is receiving. Ms. Freeman responded that the programs have been unsure regarding where to submit their assessment data because of past issues with the database. Dr. Carter responded that she has provided all the department heads in her division with a format for submitting assessment information. While she has received reports from all other programs in the division, she has not received any submissions from the computer technology programs. Ms. Freeman reports that she has asked for reports from the program faculty and has received some and been told that the work is in progress in the others. Dr. Rényi asked that if the programs do submit grades, how do they make the distinction between submitting grades and submitting assessment results when both are different kinds of assessments?

Ms. Hernández Vélez noted concerns about the Advisory Committee for the programs and asked why there were no minutes from their meetings. It was explained that the current Dean of the division noted many such lapses when she assumed her position a few years ago and that she has been addressing this and other oversights. Dr. Hirsch reported that the College is moving to an electronic submission format, which will enable such records to be posted and shared. Regarding the composition of the Advisory Committee, Dr. Carter explained that members are mostly from small to medium-sized companies and are typically the head of the technology division in the company. Dr. Rényi said that there is a member of Comcast on the Board of Trustees, who should be able to suggest someone for the Advisory Committee. She also noted

that there was a contingent of the City of Philadelphia's IT department that has been promoting technology innovations. Ms. Hernández Velez said the Committee's members can also suggest someone from the City.

The Committee expressed their serious concerns that they did not receive any evidence of student learning as part of the review. It is unacceptable to ask the Committee to make a decision when no data have been provided. As such, the computer programs cannot be approved.

Action: The Student Outcomes Committee unanimously recommends that no action take place until documented evidence of student learning is submitted. Such evidence should be submitted by August 30, 2018 in order for the Committee to determine the future of the programs when it reconvenes on September 6, 2018.

(c) Workforce and Economic Innovation Program Update

Ms. de Fries described how the Citywide Workforce Strategy is a significant step forward for the City to bring people from different areas together. The City has identified the College as the lead in "Fueling Philadelphia's Talent Engine: A Citywide Workforce Strategy." Dr. Generals commented that the work by the Division of Workforce and Economic Innovation is impacting the focus of the College. To move workforce efforts forward, the College needs the support of the Board in order to expand and improve the equipment, space, and staff required to do so. Ms. de Fries explained that the Division of Workforce and Economic Innovation has made progress with Career Connections, but given the size of the College, Career Connections is not a sizeable resource. In comparison, JEVS has about 12 careerrelated staff people, while the College's Career Connections has four full-time staff.

Ms. de Fries described how the division is in talks with Philadelphia Works to fund three job-development positions; the proposal for this will be submitted soon. While employers do contact the College to come to campus, the division should more proactively be recruiting for this. Ms. Fulmore-Townsend asked if the division has the capacity to respond to or coordinate when employers do want to come to the College. Ms. de Fries said that the Division of Workforce and Economic Innovation has hired an Employment Management Specialist, who has been working on contacts coming in but has not yet ramped up efforts to be strategically proactive. Ms. Fulmore-Townsend also asked about the College's role in coordinating across the different agencies (such as the Chamber of Commerce, the School District, and Philadelphia Works) that are leading workforce efforts across various industry sectors, including manufacturing, technology, transportation and logistics, business, retail and hospitality, healthcare, and early childhood education. Ms. de Fries has made the division's staff members pointpersons for specific sectors; a new group focused on technology is an example. The Corporate Solutions and Career Connections units in the division meet internally to discuss cross-employment needs (such as training for existing employees, creating a pipeline for new employees, and hiring College students) and to share information. There are plans for a CRM for a database for all

departments, which could be eventually shared more broadly across the College. This will allow for greater coordination and documentation of interactions between the College and employers.

Dr. Rényi asked if the division has been able to develop five-year goals to support the College's vision. Ms. de Fries explained that the division has a strategic plan with six goals that are aligned with the College's strategic plan. Dr. Rényi requested the plan and goals be provided to the Committee so that they may be incorporated into the Student Success Dashboard.

(d) New Business

There was no new business.

Next Meeting

The next meeting of the Student Outcomes Committee of the Board is scheduled for September 6, 2018 at 1:30 p.m. in Conference Room M2-34.

Attachments:

Minutes of May 3, 2018 Computer Information Systems - Information Technology A.A. S. and Network and Systems Administration Proficiency Certificate Program Computer Science A.S. and Computer Programming and Software Development Proficiency Certificate Program

Fueling Philadelphia's Talent Engine: A Citywide Workforce Strategy – Executive Summary Workforce and Economic Innovation (WEI) – Program Update

Community College of Philadelphia

Academic Program Review: A.A. in Interior Design

Executive Summary

Summer 2018

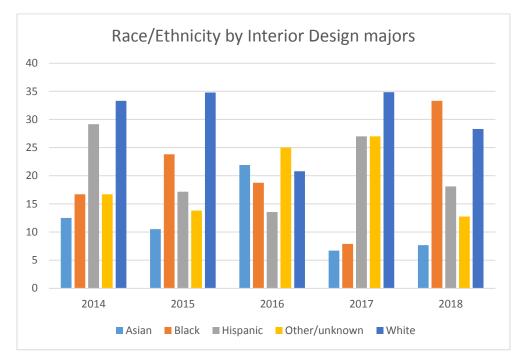
David Bertram, Teresa Frizell, Elizabeth Masters AIA, AFAAR

Executive Summary

A. Key Findings

Enrollment and Demographics

- i. Annual Interior Design program enrollment between 2013-2018 has been between 12-20 students.
- ii. Since Fall 2013 the program has been comprised of between 83-100% female students.
- iii. Due to the small size of the Program, it is not possible to draw conclusions about trends in enrollment by race/ethnicity. The Program's demographics vary as shown in the graph below.



- iv. The majority of students are between 22-29 years old.
- v. Sections typically enroll between 50-60% capacity.

Retention

- vi. The Program's five-year Fall-to-Fall retention rates averaged 26%. College-wide the average percentage of students who return to the same program is 36%.
- vii. The five-year Fall-to-Spring retention rates averaged 78%. College-wide average of students returning to the same program Fall-to-Spring is 64%. The Interior Design program's retention rates have equaled, or exceeded the College-wide Fall-to-Spring retention rates each year by a maximum of 33%.

Graduation

The 2013 Academic Audit for Architecture/Interior Design recommended the Program make changes to increase its graduation rate. The Program implemented curricular changes in response to the recommendation.

- viii. Spring 2018 enrollment was 14 students (233%) higher than Spring 2013.
- ix. The Program has increased the number of degrees awarded annually since 2013, with a high of 14 in 2015 and 9 in 2017.

Transfer

- x. The Program's transfer rate for students entering the College between Fall 2011-Spring 2016 was 53%.
- xi. The post-transfer graduation rate during the same time period was 12%.
- xii. In Spring 2018, the Head of the Architecture, Design, and Construction Department met with program directors of Jefferson University/Philadelphia University's Architecture, Interior Design, and Construction Management programs and assisted in completing articulation agreements for the three programs. It is anticipated that the agreements will be executed by Spring 2019.

Assessment

- xiii. Interior Design revised all Program Learning Outcomes effective Fall 2017.
- xiv. The ADC department has created a five-year assessment schedule for all Course and Program Learning Outcomes in the Department.
- xv. Prior to the revision the Program assessed 3 out of 4 of its PLOs in 2016, analyzed the data, and met the benchmarks.
- xvi. One PLO was not assessed in the past five years. It has since been changed and is on schedule to be assessed in the next five-year period.

Program Overlap

- xvii. The Program separated from Architecture in 2006. The programs continue to share faculty, approximately 90% of coursework, and an assessment calendar. They also shared program costing until 2017.
- xviii. In response to the 2013 Architecture/Interior Design Program Audit recommendation that, "The Dean of Liberal Studies and the Department Head should convene a meeting to discuss the current structure of these programs (and others in the ADC department) is truly viable" the ADC department wrote and disseminated a document that justified the division between the subjects as well as their inter-relationship. The essence of the response in this document is: "The ADC Department offers an AA degree in Architecture and a separate AA degree in Interior Design because these are two different career tracks in the professional world, each with a different route into it, and each with different, but somewhat overlapping areas of practice.

Cost

xix. The ADC Program typically costs around \$73 per credit hour more than the Liberal Studies Division and \$69 more than the College. In 2017 Architecture, Interior Design, and Building Science began submitting separate costing data in 2017. The next APR should consider separate costing data.

B. Action Items

The Office of Assessment and Evaluation makes the following recommendations for the Program:

Enrollment

- i. Determine the ideal size of the program based on physical constraints and contract requirements and create an action plan to achieve that size.
- ii. Increase average section efficiency to 67% by 2023.

Demographics

iii. Create a target and action plan to increase the number of males enrolled in the program by 2023.

Graduation

iv. Increase graduation commensurate with program growth and patterns of enrollment by 2023, using Spring 2018 graduation as a baseline.

Transfer

v. Continue to work with local Bachelor's programs to develop articulation or dual-admissions agreements.

Assessment

- vi. Implement assessments as scheduled, analyze data, and create and implement teaching and learning improvements.
- vii. Continue to work with the Office of Assessment and Evaluation to implement a useful and streamlined assessment process that ensures assessment of Course Learning Outcomes are contributing to the assessment of Program Learning Outcomes.

C. Narrative

The Interior Design Program at CCP offers instruction and skill development in the basics of interior design that considers this described scope of practice in the contexts of built context, human culture, history, and the environment. The program stresses critical thinking, analytical skills, complex problem-solving, and ergonomics in design and technical courses. Communication through oral and written communication, freehand drawing, computer

drafting, computer modeling, and physical modeling are key components of student preparation. Creation and discussion of spatial layouts, material and furniture selections develop the student's skills in interior design. The program maximizes student opportunity by providing them with skills that are marketable, in particular digital skills in computer drafting and rendering. As well, through coursework they develop a portfolio demonstrating their capabilities. This can be used as a tool for self–promotion to obtain in-field employment.

Community College of Philadelphia

Academic Program Review: A.A. in Architecture

Executive Summary

SUMMER 2018

Teresa Frizell, David Bertram, Elizabeth Masters, AIA, AFAAR

Executive Summary

A. Key Findings

Enrollment and Demographics

- i. The Architecture program has been enrolling around 30 students annually, which increased to 44 in Spring 2018. Registration for Fall 2018 affirms this increase.
- ii. Sections typically enroll between 50-60% capacity.
- iii. Enrollment of students who identify as Asian and Hispanic exceed the College's by around five percentage points.
- iv. The Program's enrollment is 63% male compared to 36% male enrollment College-wide.

Retention

- i. Fall-to-Fall retention exceeds the College's by around 10 percentage points, while Fall-to-Spring exceeds it by 15 points.
- ii. The majority of students who depart the program with fewer than 24 credits do not transfer.
- iii. The majority of students who depart the program with 24 or greater credits do transfer. This is regardless of whether or not they have graduated from CCP.

Graduation

- i. Graduation rates exceed the College's by around 11%.
- ii. 16 students graduated with an Associate's degree in Architecture in 2017.
- iii. The 2013 Academic Audit for Architecture/Interior Design recommended the Program make changes to increase its graduation rate. The graduation rate has increased steadily since the Program implemented curricular changes in response to the recommendation.

Transfer

- i. Post-transfer graduation rates are at 24%.
- ii. The majority of students who transfer with any number of credits do not graduate from other institutions.
- iii. In Spring 2018, the Head of the Architecture, Design, and Construction Department (ADC) met with program directors of the Jefferson University/Philadelphia University Architecture, Interior Design, and Construction Management programs and assisted in completing articulation agreements for the three programs. It is anticipated that they will be executed by Spring 2019.

Assessment

- i. Architecture revised all Program Learning Outcomes effective Fall 2017.
- ii. The ADC department has created a five-year assessment schedule for all Course and Program Learning Outcomes in the Department.
- iii. Prior to the revision the Program assessed 3 out of 4 of its PLOs in 2016, analyzed the data, and met the benchmarks.

- iv. One PLO was not assessed in the past five years. It has since been changed and is scheduled to be assessed in the next five-year period.
- v. The Program wrote and is implementing plans for teaching and learning improvements.

Program Overlap

- i. The Program separated from Interior Design in 2006. The programs continue to share faculty, approximately 90% of coursework, and an assessment calendar. They also shared program costing until 2017.
- ii. In response to the 2013 Architecture/Interior Design Program Audit recommendation that, "The Dean of Liberal Studies and the Department Head should convene a meeting to discuss whether the current structure of these programs (and others in the ADC department) is truly viable" the ADC department wrote and disseminated a document that justified the division between the subjects as well as their inter-relationship. The essence of the response in this document is:

The ADC Department offers an AA degree in Architecture and a separate AA degree in Interior Design because these are two different career tracks in the professional world, each with a different route into it, and each with different, but somewhat overlapping areas of practice.

Architecture is a field that is regulated at the state level. Each state has its own licensure laws to protect the health, safety, and welfare of the public. In Pennsylvania the Architects Act controls who can practice architecture and under what circumstances. In Pennsylvania there is no licensing or professional registration for interior designers, and interior designers may not practice architecture as it is defined in the Architects Act. This is one of the important reasons to keep the degrees at CCP as separate degrees.

Cost

- i. The ADC Program typically costs around \$73 per credit hour more than the Liberal Studies Division and \$69 more than the College. In 2017 Architecture, Interior Design, and Building Science began submitting separate costing data in 2017.
- **B.** Action Items: The Office of Assessment and Evaluation makes the following recommendations for the Program:

Enrollment and Retention

- i. Examine data about students who depart with fewer than 24 credits in order to draw conclusions about why these students depart the program.
- ii. Determine the ideal size of the program based on physical/space constraints and contract requirements and create on action plan to achieve that size.

Graduation

i. Increase graduation commensurate with program growth and patterns of enrollment by 2023, using Spring 2018 graduation as a baseline.

Transfer

i. Continue to work with local Bachelor's programs to develop articulation or dual-admissions agreements.

Assessment

- i. Implement assessments as scheduled, analyze data, and create and implement teaching and learning improvements.
- ii. Continue to work with the Office of Assessment and Evaluation to implement a useful and streamlined assessment process that ensures assessment of Course Learning Outcomes are contributing to the assessment of Program Learning Outcomes.

C. Narrative

The Architecture program is focused on preparing the student for transfer to an accredited program and on providing the student with the requisite skills to acquire entry-level employment while in school. Design and construction of buildings, structures and environments is the area of practice where architects create the overall form and aesthetic of buildings and assure that the resulting design is not only beautiful, but that it meets the standard of protecting public health, safety, and welfare.

Instruction in Architecture initially focuses on the development of skills in two- and threedimensional composition of objects and spaces, visual and critical thinking, pattern and image-making, design thinking, and problem-solving, all leading to the schematic design of the overall building form and aesthetics, facades, and interior spatial layouts. This course of study covers academic content similar to accredited architecture programs at the level of the first two years of study.

The Program has recently made curricular and assessment changes to keep abreast of changes in the field, especially in technology. The Department Head also created and is implementing a comprehensive assessment calendar. Prior to 2018 it assessed three out of four Program Learning Outcomes and met benchmark in all three. Despite this, the faculty created and are implementing teaching and learning improvements.

The Bureau of Labor Statistics predicts modest growth in Architecture-related fields. The current median wage for Architects in the Philadelphia Metropolitan Statistical area is \$33.30/hour.

Community College of Philadelphia

Academic Program Review: A.A.S in Building Science Executive Summary

Summer 2018

Teresa Frizell, David Bertram, Melanie Bailey

Executive Summary

A. Key Findings

Demographics

- i. Between 2013-2018 the Building Science program has enrolled between 9-12 students annually.
- ii. The Program has recently shifted from a majority of students enrolled part-time to 75% of students enrolled full-time.
- iii. 87.5% of Program enrollment is Male, compared to 36% at the College.
- iv. Beginning Spring 2018, racial/ethnic enrollment is within 4% of the College's. Prior to that time enrollment of students who identified as Black Non-Hispanic exceeded the College's by around 30%.

Retention

- i. The Program's five-year Fall-to-Fall retention rates averaged 45.5%. College-wide the average percentage of students who return to the same program Fall-to-Fall is 36%.
- ii. The Program's five-year Fall-to-Spring retention rates averaged 66.7%. The College-wide average percentage of students returning to the same program Fall-to-Spring is 64%.
- iii. Fall-to-Fall and Fall-to-Spring retention have exceeded the College's by 2-22%.
- iv. The majority of students who leave the program do so having earned between 0-11 credits.

Graduation

i. The Program has issued two Associates of Applied Science (AAS) Degrees.

Program Management

- i. From 2017-2018 the Program was under the direction of a new Program Coordinator who instituted substantial changes to curriculum, assessment, marketing, and industry connections.
- ii. As of July 2018, the position of Program Coordinator is again vacant.
- **B.** Action Items: The Office of Assessment and Evaluation makes the following recommendations for the Program:

By June 30, 2019 the Program should prepare a report on the viability of the Building Science program with regards to:

- i. The Program's ability to recruit, retain, and move students through the program to completion.
- ii. The Program's ability to capitalize on industry connections to create relevant curriculum and job placement.
- iii. The Building Science Program's relationship to other ADC offerings, especially construction management, and its ability to offer students unique and in-demand skills and knowledge.

C. Narrative

Building science careers are at the forefront of a new concept of how we design, build, and analyze structures. Professionals understand the effects of moisture dynamics, air movement, air quality, solar heat gain, and climate constraints on the built environment, in addition to appropriate HVAC and renewable energy implementation. Individuals with an interest in architecture, construction, and energy are being drawn into this career path due to global trends promoting environmentally responsible construction and retrofits.

From 2015 until 2017 the position of Program Coordinator for Building Science was vacant. Melanie Bailey accepted the position for the Summer of 2017. Ms. Bailey, along with David Bertram--Department Head of Architecture, Design, and Construction--made some significant changes to both the Building Science and Energy Conservation Programs, during the 2017-18 school year. The modifications ware intended to update the relevance of the program, enhance professional relationships, and increase industry job opportunities for students.

Community College of Philadelphia

Academic Program Review: Energy Conservation Academic Certificate Executive Summary

Melanie Bailey, David Bertram, Teresa Frizell

Executive Summary

A. Key Findings

i. Two students have earned an Energy Conservation Academic Certificate since its inception in 2011.

ii. The Department Head questions the power of the Energy Conservation Academic Certificate to help students gain in-field employment.

B. Action Items: The Office of Assessment and Evaluation makes the following recommendations for the Program.

By June 30, 2019 the Program should prepare a report on the viability of the Energy Conservation Certificate with regards to:

- i. The Program's ability to recruit, retain, and move students through the program to completion.
- ii. The Program's ability to capitalize on industry connections to create relevant curriculum and job placement.
- iii. The Energy Conservation Certificate's relationship to other ADC offerings, especially construction management, and its ability to offer students unique and in-demand skills and knowledge.

C. Narrative

Energy Conservation careers are at the forefront of a new concept of how we design, build, and analyze structures. Professionals understand the effects of moisture dynamics, air movement, air quality, solar heat gain, and climate constraints on the built environment, in addition to appropriate HVAC and renewable energy implementation. Individuals with an interest in architecture, construction, and energy are being drawn into this career path due to global trends promoting environmentally responsible construction and retrofits.

From 2015 until 2017 the position of Program Coordinator for Building Science, who also oversees the Energy Conservation Certificate, was vacant. Melanie Bailey accepted the position for the Summer of 2017. Ms. Bailey, along with David Bertram--Department Head of Architecture, Design, and Construction--made some significant changes to both the Building Science and Energy Conservation Programs, during the 2017-18 school year. The position of Program Coordinator is again vacant.