

# Bakersfield College 2018-2019

## Program Review – Annual Update - Non Instructional

Program Name: Office of the Dean of Instruction over the Bachelor of Science in Industrial Automation, Engineering and Systems, Industrial Technology, Academic Development, and Apprenticeship

Program Type (Administrative, Student Affairs, Academic Affairs, Other): Administrative

**Bakersfield College Mission:** Bakersfield College provides opportunities for students from diverse economic, cultural, and educational backgrounds to attain Associate and Baccalaureate degrees and certificates, workplace skills, and preparation for transfer. Our rigorous and supportive learning environment fosters students' abilities to think critically, communicate effectively, and demonstrate competencies and skills in order to engage productively in their communities and the world

### **Describe how the program supports the Bakersfield College Mission:**

As a unit of Instruction, the mission of the Office of the Dean of Instruction over the Bachelor of Science in Industrial Automation, Engineering and Systems, Industrial Technology, Academic Development, and Apprenticeship is to provide leadership in the development and evaluation of instructional programs, academic support services, faculty, and curriculum to ensure integrity and excellence of academics in these disciplines at Bakersfield College.

### **Program Goals:**

A. List the program's current goals. For each goal (minimum of 2 goals), discuss progress and changes. If the program is addressing more than two (2) goals, please duplicate this section. Please provide an action plan for each goal that gives the steps to completing the goal and the timeline.

1. **Program Goal:** Support the development of the curriculum in a baccalaureate degree within the Industrial Technology programs.

**List the institutional goals from the Bakersfield College Strategic Plan that will be advanced upon completion of this goal:** Student Learning; Student Progression and Completion, Leadership & Engagement

(Student Learning, Student Progression and Completion, Leadership and Engagement)

**Progress on goal achievement:** Three courses that were in development have been approved by the college, BOT and state. A program modification has been submitted to the Curriculum Committee for 2018-19 processing. This modification puts total program units at 120, aligning it with other baccalaureate programs in the pilot schools and giving our students more flexibility for program completion.

### **Status Update – Action Plan and any link to Resource Requests:**

#### **ACTION PLAN:** Spring 2019

1. Track progress of modification in Curriculum Committee through S19
2. Submit approved modification to Board of Trustees for approval in spring
3. Submit BOT-approved modification to State Chancellor's Office for approval in spring
4. Submit approved program changes to Instruction Office for inclusion in 2019-20 course catalog
5. Inform program's dedicated counselor of approval so she can message all students about the program modification

2. **Program Goal:** Identify resources to support the development of an Engineering and Industrial Technology program at the Delano Center.

**List the institutional goals from the Bakersfield College Strategic Plan that will be advanced upon completion of this goal.:** Student Learning; Student Progression and Completion, Leadership & Engagement

(1. Student Learning, 2. Student Progression and Completion, 3. Facilities, 4. Leadership and Engagement)

**Progress on goal achievement:** Increased funding to support Engineering and Industrial Technology in the rural communities was garnered from Assemblyman Rudy Salas. Additional funding came through our proposal for Strong Work Force monies. These two sources have allowed us to move forward with these goals. Our HVAC (Heating, Ventilation and Air Conditioning) classes were launched in Delano this fall. A newly approved Certificate of Achievement provides impetus for students to complete a series of courses in that field. The funds also provided the starting point for planning for the creation of a mobile welding unit to support the rural communities of Delano, Arvin and elsewhere. In support of HVAC and Industrial Technology, Electronics courses were developed as dual enrollment in the North Kern area to support program growth in fall.

**Status Update – Action Plan and link to Resource Requests**

**ACTION PLAN:** 2018-19

1. Evaluate success of Dual Enrollment in Delano Electronics courses offered this fall in terms of enrollment to plan for viability of program growth.
2. Use data collected from #1 above to inform spring, summer and fall scheduling
3. Work with IT Chair and welding faculty to develop plan for creation of mobile welding lab and ways to use the lab in classes and community events

B. List new or revised goals (if applicable)

**Program Goal:** Oversee creation of Certificate of Achievement in Logistics to meet goals of CCPT2 Grant. Program will include a dual enrollment component that will be offered at McFarland High School and in the Kern High School District. The certificate is stackable so that students have the option to work toward an AS and BS in Industrial Automation at Bakersfield College or a bachelor's degree in supply-side logistics through CSUB.

**List the institutional goals from the Bakersfield College Strategic Plan that will be advanced upon completion of this goal? :** Student Learning, Student Progression and Completion, Leadership and Engagement

(Student Learning, Student Progression and Completion, Facilities, Leadership and Engagement)

**Progress on goal achievement:** Meetings with industry representatives in warehouse/fulfillment centers have been scheduled to garner feedback before a program of record is created. A draft program for the certificate has been created, and this will be modified based on industry input

**Status Update – Action Plan and link to Resource Requests:**

**ACTION PLAN:** Spring 2019/Fall 2019

1. Engage all partners in dialog—industry, high schools, CSUB and others through planning conference call—October 2018
2. Meet with L'Oreal, Dollar General, Nestle and Caterpillar in listening sessions to better understand what skill sets employers are looking for that would result from our program – October 2018

3. Draft certificate proposal that will include writing curriculum and seek approval for special comp to facilitate curriculum and program creation—fall 2018
4. Plan for program’s potential faculty needs—Fall 2018
5. Submit curriculum and program to BC Curriculum Committee, BOT and State—Spring/Summer 2019
6. Offer first courses in program in Fall 2019

### **Program Analysis:**

Take a look at your trend data (all programs should have some form of data that is used to look at changes over time). Please report on any unexpected changes or challenges that your program encountered this cycle:

1. How does your trend data (or other data your area collects) impact your decision making process for your program?

This administrative unit underwent significant change in the past year including:

- A new permanent dean over the area replaced an interim dean just four months ago. The interim returned to department chair duties.
- One department was separated into two new departments and chairs were elected for these departments. Engineering & Industrial Technology became:
  - Engineering & Systems
  - Industrial Technology
- One department, BMIT, was moved to the area overseen by Dean Mourtzanos.
- Another existing department, Academic Development, was relocated into this unit.

The result of these many changes is that the data presented in Coursebook does not completely reflect this administrative department. Additionally, AB 705 implementation is impacting the newest department, ACDV, so data from last year does not reflect the focus of the department this year. ACDV faculty have proposed that their department transition to becoming an Education Department. The proposal has been submitted to Academic Senate, CCA and administration. This is an important direction for ACDV for the future of the department, the faculty and this institution. This Dean of Instruction administrative unit is fully supporting the faculty’s desire to make this transition.

Regarding decision making, the previous year’s trend data for the combined Engineering & IT Department was helpful in terms of scheduling classes and providing a catalyst for dialog about new program options. In the later case, additional data was gathered concerning labor market statistics to ensure proper planning for a new program in logistics. That planning is ongoing. See new goal in section 2 of this document.

2. Evidence of Program Dialog of data

- If you have had time to review and discuss your program’s data with members of your department, attach documentation of your discussion. Documentation can come in the form of minutes from meetings or retreats, email dialog or any other ways that show substantive discussion.

Discussion took place between the dean and department chairs in individual meetings in the dean’s office. Faculty shared Coursebook data (combined

Program dialog has been evident in our planning for the new Logistics program. Various activities have been set up, labor market data gathered, and a planning conference call held. See attached notes from conference call and attached labor market data files. This dialog encompasses our Department Chair for Engineering & Systems under whose auspices the proposed Logistics program will be placed.

3. Were there any changes to student demographics (age, gender, or ethnicity) for the past cycle?

Trend Data show the following changes note in student demographics for some programs in this administrative unit:

- Academic Development: Hispanic and White students increased by 4% in five years
- Apprenticeship: Hispanic students increased by 16% with a near corresponding decline in white students
- Architecture: students are skewing older... 19/Younger category (down 12%) and 20-29 (up 9%)
- Construction: enrollment increase of 40% over five years has had little impact on other demographics except age. Students in the 30-39 age group increased 10% in five years.
- Hispanic *Electrical Technology* students represent 66% of enrollment.
- *Engineering* is experiencing a 12% increase in the 19/Younger category of students over five years, reflective of the current national and international focus on STEM career opportunities.
- *Industrial Drawing* students are trending toward youth. The 19/Younger category more than doubled from 16% to 33% in five years.
- *Manufacturing Technology* students are getting younger as a group. The 19/Younger category up 8% over five years.
- *Water Technology*, in the three years since the program's inception, has seen a 10% increase in Hispanic student enrollment. Seventy-eight percent of students are aged 20-39 with only 5% at 19 and younger.
- Students in the *Welding* program have more than doubled in the 19/Younger category from 22% to 46% over five years. All other age categories have declined.
- *Woodworking* students are getting younger, with the oldest age group, 40/Older, decreasing by 13% in five years. Corresponding to that time, the 19/Younger category increased 4% and the 20-29 age group increased 9%. Other data is largely unchanged.

4. Equity gaps

- Please look for large differences, or gaps, between top performing groups and others. Consider how you could identify the reasons behind these gaps, and if there changes that could be made to reduce them. For in depth review of equity issues, and on changes that are being made campus-wide, please refer to the current [Bakersfield College Student Equity Plan](#).

**Overall analysis of equity gaps:**

The male-female student gap is the largest issue in many programs in this administrative unit. The following programs saw some improvement over the past five years, but gaps remain high, favoring male students. Participation of program faculty and others in Women in Trades events and other community outreach activities that target female students may result in decreasing this gap. Working directly with BC's CTE team, especially education advisors, to inform female students of lucrative job opportunities in non-traditional fields may also bridge the gap. This topic and relevant gender gap data will become a point of discussion and action planning in the ITT pathway where many of these programs reside.

The *Apprenticeship* program represents one of the greatest equity gaps in the unit as 97% of its students are male. Since students are selected into the program by local trade unions, Bakersfield College has little control over placement. A new program coming out of the unions to begin programming in high school (pilot program will begin in Delano), it is hoped that some ground will be gained on this inequity.

*Architecture* has a 2% increase in the number of females in the program but the male-female gap is still high: 77% vs 22% respectively despite a female instructor in the program.

*Automotive Technology* is 89% male, down 1% over five years. Students are largely Hispanic (73%).

In *Construction Technology*, enrollment is up 40% over five years but male dominance in this field is relatively unchanged at 89%.

*Electrical Technology* is 87% male, down 9% over five years, which is encouraging. Ethnicity is relatively unchanged over five years in any category.

*Engineering* is 80% male, and female students have seen a 5% increase over five years.

*Industrial Automation* data reflects only three years as this is a new program. Female students have declined 11% in that time despite a dedicated program counselor who encourages enrollment among female students.

Female *Industrial Drawing* students have increased 4% over the trend period.

*Manufacturing Technology* is 92% male, up 6% over five years.

*Water Technology*, another fairly new program, is 95% male, up 3% over three years.

*Welding* is 92% male, down 1% over five years.

In the *Woodworking Program*, female students make up 22% of enrollment, a growth of 9 % over five years.

5. Please describe any recent achievements of members of your area who have won awards or distinctions, new projects your area has implemented, professional development work, professional conference presentations or recently published work.:

A) Our Automotive Technology team recently hosted a regional training meeting for area professionals as well as students. Sponsored by a national industry partner, the event in our BC Automotive Technology Facility provided much needed training in the region while allowing BC students to learn new skills in a way otherwise unavailable to them.

B) Our programs received funding provided by Assemblyman Rudy Salas that will augment welding, industrial technology and HVAC programming in the rural communities.

6. The college has embarked on significant efforts such as **Guided Pathways**, **affinity groups** and **completion coaching communities** to improve the success and completion rates of our students. Please describe what your program/department/office is doing to contribute to these efforts.:

I oversee the ITT Pathway. We hold monthly meetings that are attended, on average, by 8 faculty, a counselor, an educational advisor, and classified and management staff. On an alternating Tuesday, a core team of faculty lead, department chairs, CTE Director, educational advisor, counselor and myself meet in an additional gathering to review data and prepare material and work plans to discuss at the monthly all-team meeting. We are planning strategies to keep the students in our pathway informed of options open to them. Meanwhile, we are targeting students who are close to completing Pathway milestones and contacting those students directly to assist them in reaching goals. Our first priority, as determined at our most recent Core Team meeting, is to review, identify corrections to, and provide instruction for update on our Pathways Mapper pages. Program Manager Martin Perez and Educational Advisor Katie Makaiwi are taking the lead on identifying errors or missing information. Once they do, teams of faculty in each program area will review proposed changes so they can be sent to the person in charge of updating Program Mapper.

7. Explain your role if you are involved in Dual Enrollment, Inmate Education, or Rural Initiatives.: Dual enrollment courses are part of the programming I oversee. Welding courses are included in the Wonderful Academies for Ag Business and Ag Mechanics. Electronics courses are being offered as dual enrollment to feed the Engineering and Systems, Industrial Technology and Industrial Automation programs. I serve to assist faculty in troubleshooting issues that arise. For example, one the welding courses originally slated for inclusion in the Wonderful Academy was determined by faculty to be the wrong course for the program and unsuitable for the available facilities. I worked with high school personnel, Wonderful representatives, Delano Center staff, Industrial Technology faculty and others to facilitate a change in program and to hire a faculty member to teach the appropriate course. As a result, dual enrolled students experienced no delay in their program and are set to graduate with their high school diploma and an associate's degree in May 2019.

### **Assessment Report - Annual Update**

As I am a new dean in this area and have only been on board a few months, I am unable to respond to this section.

A. List your Administrative Unit Outcomes (AUOs)

The following AUOs are ones I will be evaluating in next year's program review cycle:

- a. Complete faculty, classified and management evaluations in a timely manner.
- b. Encourage faculty and management employees in my unit to infuse data in program planning.
- c. Situate new Program Manager of Industrial Technology into the unit and develop this person as a valuable resource to our growing program.
- d. Facilitate and model effective and accurate community among the departments in my unit.

B. How did your outcomes results inform your program planning?

As I am a new dean in this area and have only been on board a few months, I am unable to respond to this section.

C. How do the Administrative Unit Outcomes align with Institutional Learning Outcomes?

The AUOs above connect in the following ways:

- a. Evaluations: Faculty evaluation provides opportunity to improve pedagogy and build relationships that improve teaching, which results in improved learning.
- b. Data: Helping faculty use and understand data available through KCCD Institutional Research means that they will have a better understanding of the overall impact and direction of their programs and how those programs have changed over time. Additionally, understanding this data will stimulate new thinking about how to strengthen our programs to meet student learning environment needs and institutional goals.
- c. Program Manager: Training and engaging this new employee as they come on board in late fall will free faculty in the program to focus on instruction, leaving organizational tasks to the manager.
- d. Communication: Effective communication fosters a positive employee environment and keeps employees at all levels aware of needs, concerns and opportunities. The learning environment, actually all environments, will be improved.

**Analysis of Received Resources from Previous Cycle**

**Discuss the type of resources you received and their Impact on program effectiveness?**

**Facilities:** As I am new in the role of Dean (as of June 2018), I am unaware of resources received in this category.

*If your program received a building remodel or renovation, additional furniture or beyond routine maintenance, please explain how this request or requests impacts your program and helps contribute to student success.*

- 1: Space Allocation
- 2: Renovation
- 3: Furniture
- 4: Other
- 5: Beyond Routine Maintenance

**Technology:** Dual monitors were purchased for Executive Assistant. This enabled her to open multiple screens to respond more efficiently to funding processes and other requests and needs of staff.

*If your program received technology (audio/visual – projectors, TV's, document cameras) and computers, how does the technology impact your program and help contribute to student success?*

1: Replacement Technology

2: New Technology

3: Software

4: Other \_\_\_\_\_

### **Other Equipment**

*If your program received equipment that is not considered audio/visual or computer equipment technology, please explain how these resources impact your program and help contribute to student success.*

None received.

### **Conclusion:**

Present any conclusions and findings about the program. This is an opportunity to provide a brief abstract or synopsis of your program's current circumstances and needs. Consider this a snapshot of your program if someone were to only read this portion of your annual program review.

Ours is a unit in transition. Growing and evolving programs in Industrial Technology, Engineering and Systems and Academic Development reveal many changes and opportunities in the year ahead. In this exciting time of meeting student and community needs, the evolution of Academic Development Department into the Education Department will see the influx of new programming that is highly relevant and desirable in our service area. This faculty group has already reached out to K-12 organizations and is also attending conferences related to this topic. Potential programming for a CTE certificate for teachers will meet a long-held need in the high schools. Additionally, the dire teacher shortage in the southern San Joaquin Valley bespeaks the critical nature of ACDV's response: creating an Education Department that will launch the training of new teachers who will remain in the community and improve the education attainment levels of our young people.

The Baccalaureate of Science in Industrial Automation Program received an encouraging boost in the past month when Governor Brown signed into law an extension of the pilot program so that Bakersfield College and 14 other California Community Colleges may offer a bachelor's degree through 2025. A new Program Manager in this program will increase faculty effectiveness, and the hiring of a faculty to teach upper division coursework will continue to improve our results.

Engineering & Systems will launch a new logistics program in the coming year after gathering data, meeting with industry leaders, and collaborating with educational partners to ensure that the program truly meets the needs of students, employers and educational partners. Much work is ahead, but it's wonderful and exciting work.

Industrial Technology will share in the growth of the Rural Initiatives of this institution though the infusion of funding from multiple sources and through dual enrollment programs. The department will look to expand those opportunities in the year ahead.

As an administrative unit, our role is to support this growth as we address needs for employees, equipment and in addressing trends, especially the trend that shows most of our program enrollment features male students. This particular topic will be addressed to all faculty at our spring division meeting to set the stage to understand and use data to bring about change.